Build A Motorcycle Theft Alarm For Under $5

LEADER IN THE FIELD SINCE 1912

motor CYCLIST

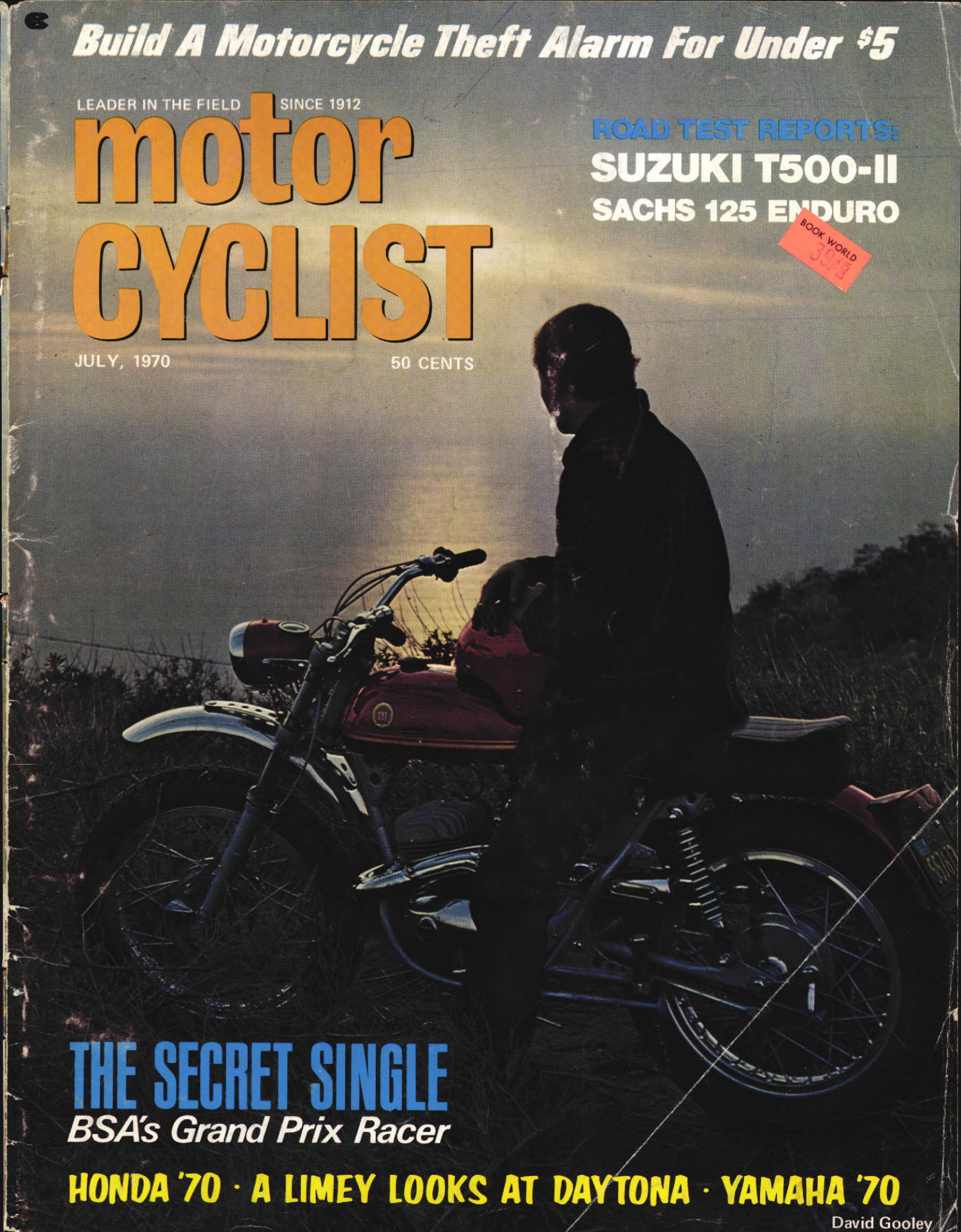
JULY, 1970 50 CENTS

ROAD TEST REPORTS:

SUZUKI T500-II

SACHS 125 ENDURO

BOOK WORLD
39.95



THE SECRET SINGLE

BSA's Grand Prix Racer

HONDA '70 · A LIMEY LOOKS AT DAYTONA · YAMAHA '70

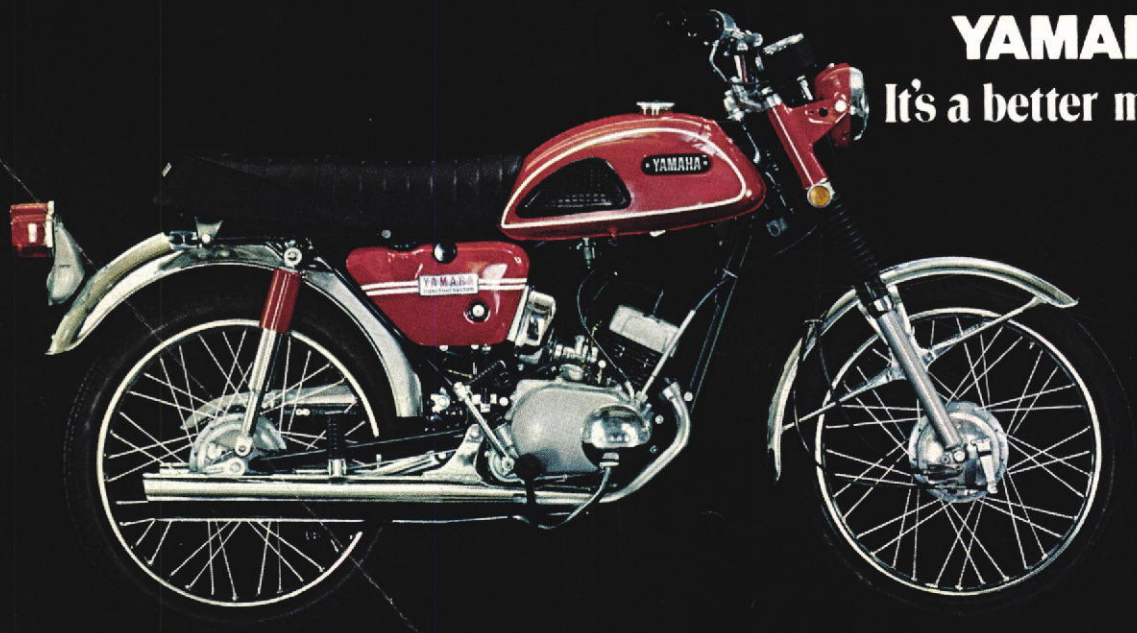
David Gooley

Catch fifth gear! Grab the throttle!
It's a whole new way
to leave the humdrum behind.

The new twin 90 HS-1 is something unique. It's a 196-pound lightweight that's put together like the big bikes. The same look, the same feel. And it's all there: five-speed gearbox, Autolube oil injection, separate instruments and an urge to travel.

So escape for a while on the HS-1, shown below and on the left, above. Or the four-speed, 170-pound, 73 cc G6-S, also shown above. Both have 4.9 horsepower. Both have what it takes to turn any old day into an adventure.

Yamaha International Corporation
P.O. Box 54540, Los Angeles, Calif. 90054
In Canada: Fred Deeley, Ltd., Vancouver, B.C.



YAMAHA
It's a better machine

motorCYCLIST MAGAZINE

LEADER IN THE FIELD SINCE 1912 No. 877 JULY, 1970

CONTENTS

COFFEE BREAK With The Editor 4
ASK JIM by Jim Davis 6
LETTERS TO THE EDITOR 10
A. M. A. NEWS 19
SPORT SLANTS 22
SUZUKI 500 TEST 23
MOTORCYCLE TOURING & CAMPING by Cliff Boswell 27
YAMAHA '70 30
THE SECRET SINGLE by Richard C. Renstrom 32
BUILD A MOTORCYCLE ALARM SYSTEM 36
SACHS 125 ENDURO TEST 37
A LIMEY LOOKS AT DAYTONA by Mick Woollett 41
PRATT'S ODYSSEY by Paul Pratt 44
MINI-BIKE CORNER by Al Jacobs 48
HARLEY-DAVIDSON 750 XR 49
HONDA '70 50
FOCUS by Larry Ethridge 52
THE MODERN MOTORCYCLE by William Hampton 53
IN THE NEWS 55
EUROPEAN NEWSLETTER by Mick Woollett 56
CLASSIFIED ADVERTISING 60
SHOWCASE 62

COVER – One of motorcycling's many advantages is that it allows the motorcyclist to ride to remote spots, in this case on a Montesa, to observe and enjoy such scenes as this. Photo by David Gooley.

THE BAGNALL PUBLISHING COMPANY
Post Office Box 638, Sierra Madre, California 91024

Publishers
WILLIAM M. BAGNALL
SHIRLEE A. BAGNALL

Editor
WILLIAM M. BAGNALL

Editorial Assistant
THELMA B. KRAMAR

European Correspondent
MICK WOOLLETT

Washington, D.C. Correspondent
JOHN HOSTETTER

Contributing Editor
JIM DAVIS

Advertising Manager
B. LAWRENCE ETHRIDGE

Custom Editor
GARY LITTLEJOHN

Touring & Camping Editor
CLIFF BOSWELL

Contributing Author
RICHARD C. RENSTROM

CONTRIBUTORS: W.L. Anderson, Paul M. Brokaw, Wm. Hampton, George Hays, Evan Jones, Walt Mahony, Terry Murray, Boyd Reynolds, Bob Schleicher, Jerry West.

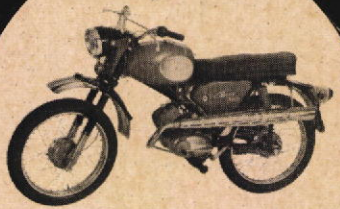
Second class postage paid at Sierra Madre, California and at additional mailing offices. An independent national magazine devoted to the interests of motorcycling, published monthly by The Bagnall Publishing Company, P. O. Box 638, Sierra Madre, Calif. 91024. Single copy price: 50c. $5 per year in U.S. ($7 U.S. funds in Canada and foreign countries). Allow three weeks notice for change of address. Please send both old and new addresses, with either label or complete address and coding as it appears on your copy. Not responsible for unsolicited editorial material. No part of this magazine may be reproduced without written consent of the publishers.

All rights reserved.

A PARTICIPATING MEMBER:
AMERICAN MOTORCYCLE ASS'N
MOTORCYCLE INDUSTRY COUNCIL

FROM THE BUILDERS OF WORLD CHAMPION MOTORCYCLES

JAWA 90cc CROSS / ROADSTER



A Go Anywhere Lightweight Whether It Be City Streets, Mountain Trails or Sport Competition, This Baby Takes You Where the Action Is!

CZ125 175cc SPORT

CZ Built a New Frame Taken From the World Champion CZ Motocross, Combined It With a New Fork Design and the New Oilmaster System! To Provide Exceptional Handling and Comfort!

JAWA 350cc CALIFORNIAN IV

Announces Its Newest, Fastest, Most Satisfying Street Machine Ever, Incorporating the New Oilmaster System With a New Dynamite 350cc Twin.

CZ MOTOCROSS 250 / 360cc

To Win Those World Championships, CZ Built a Motorcycle on Which Absolutely Nothing is Superfluous and Everything Works with Grueling Efficiency!

JAWA
AMERICAN JAWA LTD.
EAST: 38-15 Greenpoint Avenue • Long Island City, N. Y. 11101
WEST: 3748 Overland Avenue • Los Angeles, Calif. 90034
CANADA: Skoda & Jawa Motors Ltd. • Montreal, Canada P.Q.
WRITE FOR COMPLETE SPECIFICATIONS

Must Reading!

Next time you buy oil for your cycle, read the can label. If it doesn't say motorcycle oil—it isn't. There's no protection against slow starts, overheating, seizures, rough idling or other woes you may be facing. Vectol is the oil made for cycles. The can says so. What's more, it also says Vectol's natural oil stability is reinforced with RK-8, our exclusive ingredient that flashes lubrication instantly to hot spots. Holds in place for constant, undiluted film strength. So whether you are a track, trail or strictly street rider, read the oil can. You'll see why **Vectol is a must for every cycle.**

FEATURED DEALERS:

Northern Calif.

ARCATA
HONDA OF ARCATA
575 7th Street

EUREKA
MILLER MOTORCYCLES
1725 Tomlinson

CORTE MADERA
MOTORCYCLES UNLTD.
5768 Paradise Drive

HALF MOON BAY
D&D CYCLES
799 Main Street

STOCKTON
KISER BROS. HONDA
843 E. Weber Street
608 Porter Avenue

CARMICHAEL (SACTO)
CARMICHAEL HONDA
7833 Fair Oaks Blvd.

SAN JOSE
EMERY'S
1401 W. San Carlos St.
SANTA CLARA HONDA
4902 Stevens Creek Blvd.

REDWOOD CITY
MENLO CYCLERY
670 El Camino Real

MANTECA
HARVEY'S HOUSE
OF HONDA
Highway 99 & 120

SEASIDE
INTL. CYCLE CENTER
1510 Fremont Blvd.

Southern Calif.

HOLLYWOOD
HOLLYWOOD CYC. CTR.
1339 N. Highland Ave.

PASADENA
HONDA – PASADENA
1965 E. Foothill Blvd.

LONG BEACH
LONG BEACH HONDA
5105 Atlantic Ave.

CHULA VISTA
SOUTH BAY YAMAHA
165 Broadway

EL CAJON
GROVE KAWASAKI
560 E. El Cajon Blvd.

LEMON GROVE
HONDA LEMON GROVE
7562 Broadway

SAN DIEGO
GUY URQUHART
1041 Columbia St.

MAYWOOD
MAYWOOD HONDA
6101 Atlantic Blvd.

RENO, NEVADA
BILL RUDD MOTORS
570 Gentry Way

Or write Vectol, 1492 Oddstad Drive, Redwood City, Calif. 94063. Division of Kling Lubricants—leader in motorcycle, automotive, and aviation oils.

COFFEE BREAK

WITH THE EDITOR

What'll She Do? . . .

If you're interested in the performance of your motorcycle – or the family automobile – from a strictly unbiased source, we recommend you buy a copy of *Performance Data For New Passenger Cars & Motorcycles,* which compares the relative virtues and characteristics of most vehicles.

It's available at $2.25 from: Superintendent of Documents, Government Printing Office, Washington, D. C. 20402.

Mann Signs With BSA . . .

Dick Mann, Daytona 200 champ and former AMA Grand National Champion, has signed on with the Birmingham Small Arms Company to race BSA motorcycles for the remainder of the 1970 national championship season. He will race BSAs in all races with the exception of the 250cc events, in which he will ride an Ossa.

Good Deal in Wisconsin . . .

Motorcyclists in the State of Wisconsin, undoubtedly well aware of the increasing shortage of land available for their off-road use, developed and supported a legislative bill in which they pay an additional annual licensing fee, totalling seven dollars the first year and two dollars annually thereafter, with said amount being appropriated for state parks set aside strictly for their use.

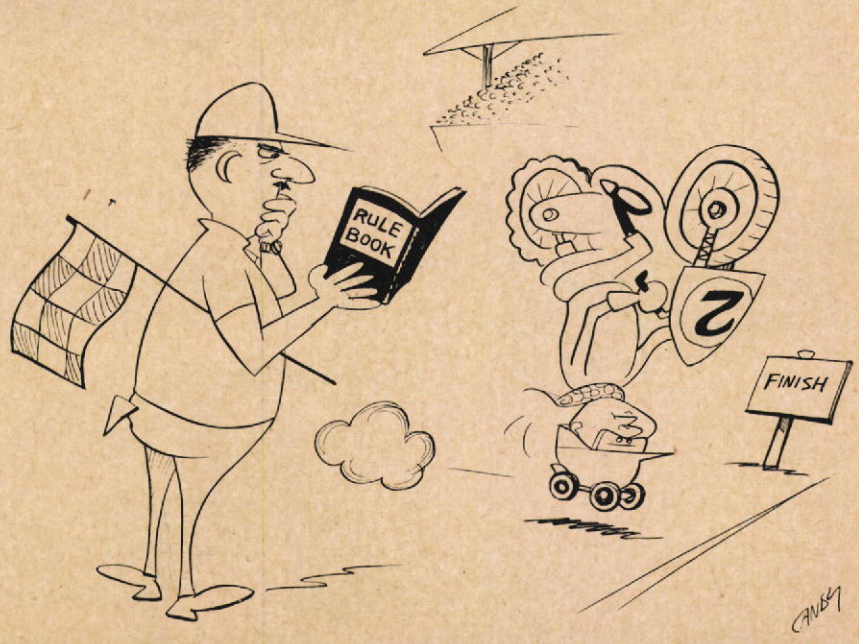
Thus, the motorcyclists were willing to pay for what they wanted, and which they eventually received, thru the formation of the Motorcycle Outdoor Recreational Program. This group, spearheaded by Rodney W. Kreunen, long-time motorcycling enthusiast and dealer, achieved their goal, and have set an example for other state motorcycling groups to follow. And the time is NOW!

The Speedway Scene . . .

Class A Speedway, on the upswing in Southern California over the past few years, got the 1970 season off to a flying start. For example, the Orange County Speedway on opening night had a *turn-away* crowd of over *one-thousand* people! Promoter Jack Milne, a former speedway world champion – who also has a motorcycle dealership in Pasadena as well as a number of bleachers for the city's annual Rose Parade – quickly erected bleacher seating for an additional thousand people for the following week.

This particular phase of motorcycle racing, which enjoys great popularity in other countries, was quite popular on the eastern and western seaboards in the decade preceding the second World War. It

Continued on Page 20



There are 56 laps to the Kent National. Suzuki took the last 52.

It wasn't even close.

The three fastest qualifying times in the trials.

52 out of 56 laps in the lead.

118 miles out of 125 in first place.

Over a half-mile in front of second place. An average speed of 83.08 mph on a twisting, rain-swept track.

That's how big Suzuki's victory was over everyone in the open class at the first Kent Washington AMA National Championship road race. A complete runaway!

The rider, Ron Grant. The machine, a Suzuki T-500 twin. The same rider and bike that turned over 151 mph at Daytona, that set three new National Land Speed records last year at Bonneville.

And Art Baumann, on another T-500 was in second place for most of the race, crashed twice and still finished fifth overall.

Not bad. And not unexpected either.

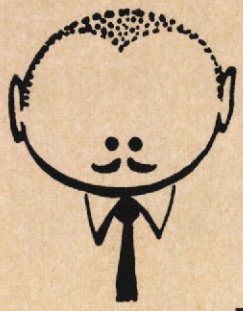
Because while all the other manufacturers are still building machines the old way, we're building them to take on the country.

And we stand on our records as to which way is best.

Suzuki:
built to take on the country.

Photo by J. Butcher

U. S. Suzuki Motor Corp., Dept. 503, 13767 Freeway Drive, Santa Fe Springs, Calif. 90670



ASK JIM

By JIM DAVIS

More On Water Injection

Having just been sent my first copy of your excellent magazine by friend Jack Mercer (who has had some correspondence with Bill Bagnall in my behalf), I am moved to respond to your article on water injection as it appeared in the August issue, number 868.

Let me relate an experience of a few years back. I purchased a brand-new Willys Jeepster in 1950 (4 cylinder F-head engine with 7.8-1 compression ratio, Carter carburetor, ordinary Autolite ignition) and immediately experienced difficulty with pre-ignition knocking. This was obviously caused by the poor quality of gasoline in those days of the Korean conflict. I had blown my fortune to buy the car and, as a concomitantly penniless student, spent my college and law school days pondering the problem of how to get the Jeepster's timing back up to standard so it would perform decently, without pinging holes in the pistons. Water to the rescue!

In those days, the Thompson Products Co. marketed a nifty install-it-yourself injection system. I wrote for literature on that unit and after studying it, decided I could make my own. It turned out to be a remarkably simple and effective system.

I used an ordinary carburetor, of larger diameter than the Carter, and placed it in series with the air cleaner and the engine's Carter. The "extra" carburetor used only water and simply served to provide a moisture-laden air supply to the regular carburetor. This emulsified mixture burned evenly and with stability, permitting me to use any old regular grade gasoline, and ignition timing somewhat ahead of factory standards. The results: superior gas mileage (25-28 with the B-W overdrive) and really sparkling snap for that little 72 hp 4, with nary a knock unless I really forced it, i.e., full throttle in top gear at 20 mph or less!

Preparing the auxiliary carburetor involved:

1. A visit to the junkyard to find a suitable unit – off a wrecked Olds as I recall.

2. Removal of everything except the venturi section with high-speed nozzle.

3. Installation of this venturi in the main air supply to the regular carburetor.

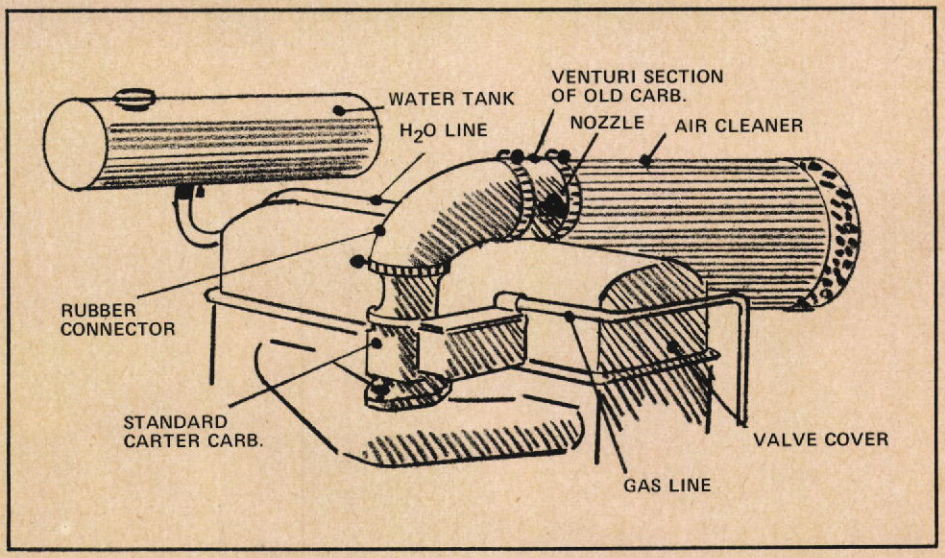
4. Piping of water to the nozzle.

The metering of the water was automatic. The faster the velocity of air through the unit, as at times of open throttle on the regular carb, the more water would be drawn into the air stream as it passed through that first venturi, to be atomized and then, on its way through the regular carburetor, to pick up its appropriate quota of gasoline. The cooling, stabilizing effect of the water droplets eliminated the pre-ignition and permitted normal operation on poor gasoline. As quality improved a little tuning produced even better performance. But forget to fill the water tank and PING! BANG! THUMP!

That old Jeepster is still running – now owned by my brother! I drove it something over 150,000 miles in 6 years of ownership; it now must have over 200,000 miles on that original engine, all of which says something about the non-destructivity of water injection!

Whether this sort of water injection (water *induction* more accurately) would produce the dramatic power-increasing effects of which you spoke in your article, only experimentation would show. Since most cycle carbs are of a side-draught configuration, it would be simplicity itself to mount 2 carbs in series, one to handle the water or water-methanol compound, the other for gasoline. On my BMW, for example, 2 more of the regular Bing units could be used, the outboard carbs, minus their slides to handle water from an auxiliary tank. Experimentation with jets would establish the appropriate quantity of water to be inducted and the metering thereof would be an automatic function of air column speed through the venturis. The regular float chambers would ensure against water flooding, whereas on the Jeepster I had to be careful not to park headed downhill, or all the water would flow out of the tank, through the auxiliary venturi and down through the regular carb into the manifold, by gravity! How embarrassing it was the time that happened, and I had to keep my date waiting while I pulled the plugs and turned the engine over to blow the water out of the cylinders! She never did quite understand that performance. I've often wondered whatever happened to her.

My apologies for rambling on! I'd be



SCHEMATIC drawing of Charles Gear's water-injected automobile engine

Once you get a taste of power

You want more.

Most people start with a smaller machine. Riding around the neighborhood. On short hauls out of town. But pretty soon you feel the limitations of that little taste of power. You start looking around for something bigger and better. And one day you're ready.

For a high-performance, high-output BMW.

And now BMW is ready for you. The new 500, 600 and 750 cc bikes are as reliable and roadworthy as any BMW ever built. The familiar flat-twin design still gives the best-balanced, smoothest ride of any bike on the road. But once you take a BMW out, you know the difference.

It's fast. Very fast. The new engines and frames allow BMW to go top speed more of the time, even in tight corners. It has a way of outriding bikes that are supposed to be faster.

And it's remarkably versatile. When you get tired of showing off around town, take it cross-country or off into the badlands. With the famous long-stroke fork, dependable shaft drive and rugged Bosch ignition system, the new BMW can go almost anywhere you want.

There's no law that says your first bike can't be a BMW. But when you've ridden the other ones first, you'll appreciate it a lot more.

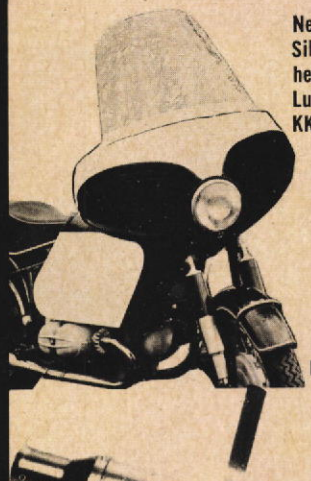
See your nearest authorized BMW dealer, or write: East: Butler & Smith, Inc., Norwood, N.J. 07648. West: Flanders Company, Pasadena, Calif. 91101. Canada: BMW Motorcycle Distributors, Toronto 12, Ont.

Bavarian Motor Works

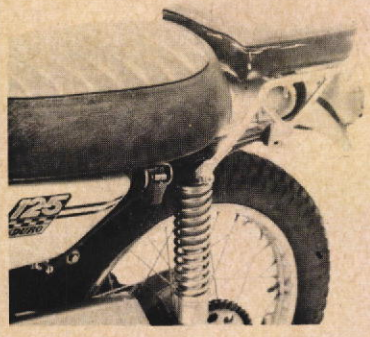
BMW

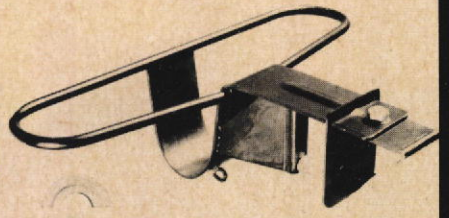
KK's GOT IT!

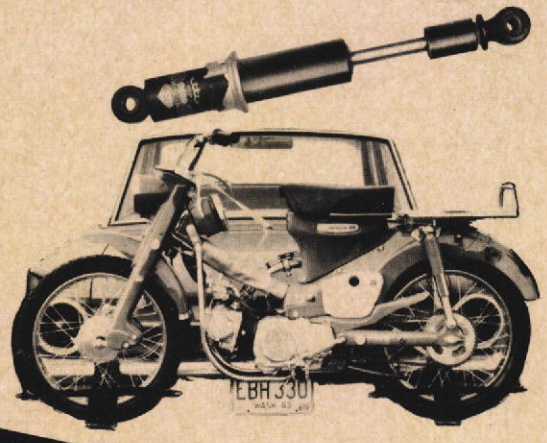
New Honda Fairings . . . Red, Silver & Blue "Easy Rider" safety helmets . . . Metzeler Tires . . Lucas electrical equipment . KK "Golden" Sprockets.



Honda "Buddy" seats, luggage racks and saddle bags . . . KLG spark plugs . . . Sta-Bil . . . "Filtron" filters . . . Koni shocks.







Bumper-mounted, chrome cycle carriers . . . Beck cycle accessories . . . Expansion chambers for 2-strokes . . .

MCM Mufflers . . . McHal Helmets . . . Webco Accessories . . . Triumph 750cc "Zip Kits" . . . Florida Cycle Supply motorcycle products...

TEL. - 513 222-1303 / 222-9803

KK SELLS TO M.C. DEALERS ONLY

MEMBER MOTORCYCLE INDUSTRY COUNCIL

"THE ENTHUSIAST'S SUPPLY HOUSE"

KK Motorcycle Supply

431 E. 3RD ST. DAYTON, OHIO 45402

W1 BECK MCM McHal K·L·G PLUGS LUCAS ELECTRICS KONI

interested in any comments you might have.

Charlie Gear
Burlington, Vermont

NOT MAJOR, BUT ANNOYING

I have a 1969 BSA Rocket 3 and have a problem with carburetion. Perhaps you might have a solution. The problem is that after the machine is warmed up and I stop with it in idle position, the rpm increase up to 2000 or so. Now when it was first started, the idle screw was set for approximately 800 rpm. Idle rpm can be regained by applying pressure on the slide nut on top of the carburetor. This isn't a major problem but a very annoying one I can assure you. The local BSA shop can't give me any assistance on it as they haven't any experience with the 3's.

Jimmy R. Hickey
Key West, Florida 33040

Jimmy – Your problem can only be two things. My first guess would be that your cables are loose and sloppy, and that when you apply pressure to the slide nut, it forces the slides back down where they belong. You might also disassemble the carburetors, and make sure that there isn't something that is binding up one or all of the carburetors. If this isn't the problem, the only thing left that I can even imagine, is that you have a manifold leak somewhere in the system. Carefully check the nuts that bolt the carburetor to the manifold, and also check the tops of the carburetors to make sure that they are tight. As for your dealer not having experience with the three cylinders, it seems that any experience that they've had with any normal motorcycle would work just as well.

RABBIT PROBLEMS

I have a few problems with my 1963 90cc Rabbit motor scooter, that I hope you can solve. The scooter was given to me by my uncle, who had taken the head apart five years ago and he never put it back together.

My first problem came when I found out that the manufacturer (Fuji Industries of Japan) no longer imports the scooter and parts are few and far between.

My second problem is when riding the scooter I have to leave the choke out, or else it will stall. Also I cannot get it to idle fast standing still. I would appreciate any help you can give me with these problems.

Ken Berry
Burbank, Calif.

P.S. Many of my friends have told me I'd be better off walking than owning a Rabbit. Could you tell me what my next step up in a bike should be?

Ken – I bet you do have some problems with your 1963 Rabbit motor scooter. I

Continued on Page 14

If the Honda Trail 90 had a
10-speed transmission it would be
almost as good as the
Kawasaki Trail Boss except
it still wouldn't have:
• 11.5 horsepower
• Double loop tube frame
• Superlube automatic oil injection
• 12,000 mile or 12 month warranty
• or that 10-speed transmission
KAWASAKI

Kawasaki Motors Corporation, 1062 McGaw Avenue, Santa Ana, Calif. 92705
Eastern Kawasaki, 3 Production Way, Avenel, New Jersey 07001

Proven at Bonneville
where over 95 percent of the entries use
"LIQUI LUBE"
It will not fly off
The best chain lube available at any price
Dependable and Longlasting

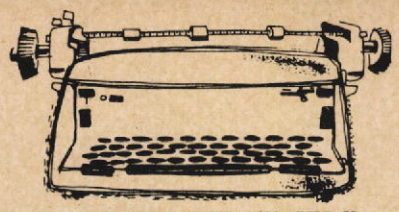
compact 4 oz. traveler

For more than 25 years the quality name in
Handlebars
Dealers note: Please write on your letterhead
FLANDERS
Dept 1
P.O. Box 2297 D
Pasadena Cal. 91105

BSA GOLD STAR PARTS
Shipped Anywhere
Jim Hunter Motorcycle Repair
Specializing in BSA repairs & used parts
1140 South Cypress St., Unit A
LaHabra, Calif. 90631, 714 / 525-1504

Choppers magazine
DRIVE YOURSELF WILD...
Monthly with CHOPPERS MAGAZINE! See the finest choppers, dressers, and drag bikes in the country, plus step by step building articles about frames, tanks, forks, and things like V8 3 wheelers. Sample the royal order of transportation with CHOPPERS MAGAZINE. 75c per copy or a 1 year subscription for $7.27. Order Now!
Ed Roth
4616 E. Slauson
Maywood, Ca 90270

Suzuki CRANKS
FACTORY AUTHORIZED REBUILDING CENTER
All Models In Stock – 50cc to 500cc
Call or Write
HOUSE OF SUZUKI - TRIUMPH
Dept. M., 16112 Harbor Blvd.
Fountain Valley, California 92708



LETTERS TO THE EDITOR

A Traveling Man . . .

First, a laudatory word for your superbly-written book, *Two-Wheel Touring & Camping,* by Boswell and Hays.

As a neophyte-tourer, it is refreshing to finally discover a "how-to" book that is complete in literally EVERY detail. There isn't a superfluous piece of subject-matter in the entire book, and as far as I can note, your recommendations and suggestions should be considered as "gospel", and followed very closely to avoid hassels and misery. It is evident that years of experience and careful thought have gone into the contents of this book. For this, I sincerely thank you. The newsstands are full of re-hashed, out-dated junk all attempting to capitalize on fads that the American Public indulges itself now and then; and it reaffirms my faith in human nature to purchase a reference work that is complete and up-to-date.

Your book was the basis for a 1400-mile tour up Coast Highway 1 from Carmel, California to Port Townsend, Washington. The motorcycle used was, believe it or not, a used, dependable Honda 160cc Scrambler! The trip took two weeks, and your Touring book was invaluable to us. A young, 18-year-old friend made the trip – I assisted in the preparation of the bike and the attendant equipment.

After seven long years, my family and I will graduate this June with that long-sought BA. Not bad for an ex-Marine rifleman who worked his way through. As a reward, a Honda 450 is in the works for next Spring. (If the gods are willing, perhaps it could be a 750.)

After the BA, the Master's perhaps. Might as well get as much as I can, so that I can teach. We aren't interested in money, but time off to live and experience as much as we can. After penny-pinching for years to afford school, we find ourselves oddities – we like this kind of life and the freedom it entails. Once I start teaching, we won't be rich, but think of the time we'll have! I have already allotted two weeks a year, just for myself, for bike touring. A man needs to get dirty, rely on himself and his resources, and have the time to think, recount past actions, and question the universe while on his back in a sleeping bag....

Until then, thanks again to you and *motorCYCLIST* Magazine for opening new realms of experience to me. Motorcycles are fascinating, very reasonable in cost to purchase and operate, and are the essence of what I was looking for back in the days of the mid-1950s when I participated in the "Sports Car Revolution"with a superb Morgan Plus Four Roadster. It isn't status or ego-food I was, or am looking for, but the essence of sport that is almost entirely physical and non-cerebral in nature. Bikes are it, and I think you and I will see the present "boom" go far into the 1970s.

Richard E. Davis
Empire, California

Curse You, William B. . . .

, Curse you, William M. Bagnall, for affording me another chance to drool over the FLH, when I will never to able to afford one! I am not going to tell you that I weigh only 160 pounds because then you would only laugh and say "What would you do with an FLH if you had one, Shorty, make a planter of it?!! And you wouldn't feel ashamed of yourself at all.

I will bury the hatchet, however, (and not in a shallow, well marked grave either) if you will promise to continue to print stories such as "Beginner's Luck" by Larry Ethridge. I thought it hilarious, and the message is sharp and clear. In the nearly 30 years that I've been riding, I've seen a lot of "hot-shots" come and go. But the guy who lives long enough to become an old bike rider is the guy who mixes his riding with large bunches of common sense, and who does his "hairy chested sport" act while he's afoot. A lot of good kids are pushing up daisies because a helmet cramped their style.

I admit that a good many of us ain't too much with our heads, but, face it men, without them we're nuthin!

Bob Ackerson
Sunnyvale, Calif.

A Welcome Awaits . . .

As a keen motorcyclist, I shall be pleased to hear from any of your readers who are active riders and contemplate

The sign of Gemini

. . . is the right sign for the easy rider who wants the last word in a mini trail bike. The high performance S.S.T. Gemini 50cc . . . 2-cycle engine . . . 4-speed transmission . . . the new carburetor for the quick start in any weather all insure high performance and great reliability. The S.S.T. Gemini is a superbly designed and strongly and carefully built bike. Take a ride today . . . compare the ride, the workmanship and the price with any other bike in the same class, and then you will know why we say you are making the right move under the right sign when you ride . . .

S.S.T. Gemini

SAN TONG COMPANY INC.

15514 SOUTH FIGUEROA, GARDENA, CALIFORNIA 90247
TELEPHONE: (213) 532-1780

S.S.T. GEMINI UNITED STATES AND CANADIAN DISTRIBUTORS

DENVER, COLORADO 80223
PREMIER DISTRIBUTING CO.
831 South Jason Street

PIKEVILLE, KENTUCKY 41501
HERMAN'S SALES & SERVICE
South Mayo Trail

ASHVILLE, NO. CAROLINA 28805
UNITED SPORTS, INC.
6 Tunnel Road

XENIA, OHIO 45385
COMPETITION ACCESSORIES, LTD.
Rt. 68 No. at Rt. 235

ROCKFORD, ILLINOIS 61102
CAREY'S DISTRIBUTING CO.
906 West State Street

LANSING, MICHIGAN 48906
OVERLAND SPORTS, LTD.
4700 North East Street

QUINCY, ILLINOIS 62301
BROADWAY IMPORTS, INC.
P.O. Box 716

LaPORTE, TEXAS 77571
SMITTY'S BIG WHEEL DISTBR'S.
421 So. 8th Street

CENTERVILLE, UTAH 84014
GEMINI MOTOR BIKE DISTBR'S., INC.
P.O. Box 805

ST. FOY, QUEBEC, CANADA
BELIVAL SPORTS (67) INC.
440 Faraday

BELL HELMETS ARE WINNERS ON THE STREET TOO!

BELL® HELMETS

A Subsidiary of Roy Richter Industries

More professional competitors wear Bell Helmets than all other makes combined. That's because the pros want all the protection they can get. On the street or on the trail — don't settle for less.

Insist on this mark on every helmet you buy

SNELL APPROVED

NEW! 1970 CATALOG

The all new 1970 Webco catalog is the most comprehensive in the motorcycle accessories industry. ■ 100 pages, fully illustrated, featuring the most wanted accessories and high performance components. Includes the complete line of high quality Webco products for motorcycle enthusiasts.

Price $1.00 . . . includes Webco racing flag decal.

WEBCO INC.

P.O. BOX 429 ■ VENICE, CALIFORNIA 90291

CYCLE LOOK ROUGH? TRY THIS STUFF! SIMICHROME SHINES SUDDENLY. . .

BEST for alloy, chrome, plastic. $1.00 per tube. Comes in ½ lb. cans, too. At most dealers. 6 tubes postpaid for $5.00, if not in your area. BLUE AWAY Pipe Cleaner, $1.50 per bottle.

Dealers: Make $$ with these. Write:

COMPETITION CHEMICALS

BOX 141, IOWA FALLS, IOWA 50126

visiting England. A welcome awaits any good leatherman!

John Shaw
6, Duke Humphrey Road
Blackheath
London, S. E. 3
England

Sammie Fan

I solemnly swear never again will I laugh when the lady next door drives off on her husband's BMW. After reading your article entitled "Hillclimb" in the May issue of *motorCYCLIST* I was quite surprised to see that a woman actually competed and did so well, too!!

I believe Miss "Sammie" Dunn has greatly contributed to establishing a name for female bikers by her spectacular performance at Saddleback Park. It takes a real artist to power a Rickman Triumph 500 up that hill and this is testimony of the capabilities of female bikers.

If the information is available, I would like to know more about Miss Dunn. Your article touched a few of her talents and has aroused my curiosity no end!! Please tell me more about her.

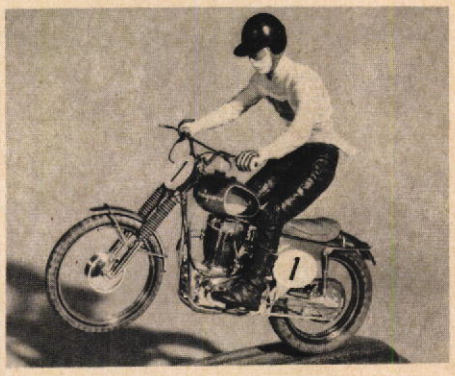
John W. Sells
Alexandria, Va.

Ed. – I'd like to know more about Miss Dunn, too, but my wife is keeping her eyes on me.

Super Model . . .

Please find enclosed a photograph of a model which I have made.

The model shows the Swedish partnership which raced to the 1963 World Motocross championship, Rolf Tibblin (500cc Husqvarna). Tibblin is one of the greatest names in moto-cross as he is the only rider to have become champion in both classes. He won the 250cc title in 1959 and the 500cc title in 1962 and again in 1963.



The scale of the model is 1/7. It is all hand-made and it has taken about 1,000 hours to make. Most of the motorcycle parts have been filed from pieces of light alloy and then polished. The rider is made in glass fiber.

I am a 27-year-old clerk in the County Court and find model making a most relaxing hobby.

Peter Ansell
Suffolk, England

ANNOUNCING THE MONTH OF ☆☆JULY☆☆ is KAWASAKI'S Once a Year OLD TIME used motorcycle SELL a-bration

During this month your Kawasaki dealer is having the *Sale of the Year!*

His inventories are up, so you will have a good selection — His prices are down, so you can make the deal *you* want —

Your Kawasaki Dealer offers you completely overhauled re-conditioned motorcycles that carry special warranties — during this mammoth sale of the year — This is a first in the motorcycle business!

See Your Kawasaki Dealer today!

Kawasaki Motors Corp.

1062 McGAW AVENUE • SANTA ANA, CALIFORNIA 92705

ASK JIM

Continued from Page 8

may be able to solve some of them, but not the basic one, and that is that you own a Rabbit motor scooter. This is your fault, not mine. As for the scooter being given to you by your uncle, I would check and see why your uncle dislikes you so intensely. As for why he never put it back together, this you should be able to guess by now. As to why Rabbits are no longer imported into the United States, you shouldn't have any problem figuring this out. Years ago, over in Japan I had a tiny Rabbit motor scooter. This, of course, was before I learned better. While competing in a field meet as part of an all Japan motorcycle club event, I had the rare experience of jumping my thundering Rabbit off a plank which was placed roughly 12 inches above the ground. I won't go into long details about my abrasions and sore spots, but I will tell you that both wheels broke off to the delight of the Japanese crowd. Now that I look back on it, I can see why they were laughing. Your second problem, as to leaving the choke out, seems fairly simple. If your uncle started the work on the bike and then gave up, allowing the scooter to sit for five years, your fuel system is probably so clogged with gum and gunk and dirt and varnish and I don't know what else, that you are lucky that any gasoline at all is getting to the gastank or to the carburetor. As for it idling fast while standing still, I would say that this is also a fuel starvation problem. About all you can do is pull the carburetor apart, pull the fuel tap apart, and dump them all in carburetor cleaner, and then blow them out with air. This should solve the problems. As for many of your friends telling you you'd be better off walking than owning a Rabbit, about all I can do is agree with them. As for your next step up from a Rabbit, have you given any thought to a Hamster?

A NEW ONE FOR $200

I would like to know how you would rate a 106cc motorcycle made by Moto Gilera of Italy. This is a 1967 model with a 4-stroke engine and was sold by Sears, Roebuck & Co.

What do you think about paying $200 for a new one?

Walter P. Lucas
Chicago, Illinois

P.S. Would you also offer advice as to why it only goes 55 mph with a 150 lb. rider on a good, straight road. The Owner's Manual claims 63 mph as top speed. I use 80 octane gasoline. Should I use a higher octane gas for a faster speed?

Walter – I would rate the 106 CC Gilera motorcycle as average or above. Gilera has been building motorcycles for many many years, and when you toss in the Sears guarantee behind it, you've got a pretty good product. As for paying $200 for a new one, I probably would. If the motorcycle wasn't completely new, I wouldn't pop down that kind of money. As for why it only goes 55 miles an hour, I wouldn't worry about that too much. Most manufacturers have a tendency to stretch the truth a tiny bit when it comes to horsepower and top speed. Look over some of the tests in Motor Cyclist and check how fast the 100cc motorcycles go, and you will see that 55 miles and hour isn't so bad. As for cranking up the octane rating, forget about it. A higher octane rating isn't going to get you a higher speed.

UNDECIDED

I have had very little riding experience and would like to purchase a 1970 Kawasaki 100cc Trail Boss. Do you think it would be wise to purchase this one, or a slightly used comparably equipped one? Thanks for your time.

Steve Prewitt
Edmund, Okla.

Steve – I am not going to try to hustle the new Trail Boss, or any other motorcycle on the market. These are some basic rules to buying a motorcycle though. When you are spending $400 or $500 for a brand new motorcycle, equipped with all the goodies and you put that up against the price you would pay for a comparable used motorcycle with all the goodies, I don't think you have much choice. Why buy someone elses troubles? We just tested the Trail Boss in the last issue, and found it to be an excellent motorcycle. If you've got the money, purchase a new one. If you don't have the money, save up.

SPARK YOUR READING• PLEASURE!

SUBSCRIBE TODAY TO THE ALL-NEW

'motorCYCLIST'

One Year For $5 – Two Years For $9

Canadian and Foreign Subscriptions $7.00-one year – $13.00-two years Equivalent in U. S. Currency.

Send Cash, Check or Money Order To:
'motorCYCLIST' Magazine
Box 638
Sierra Madre, Calif. 91024

Please Print Plainly

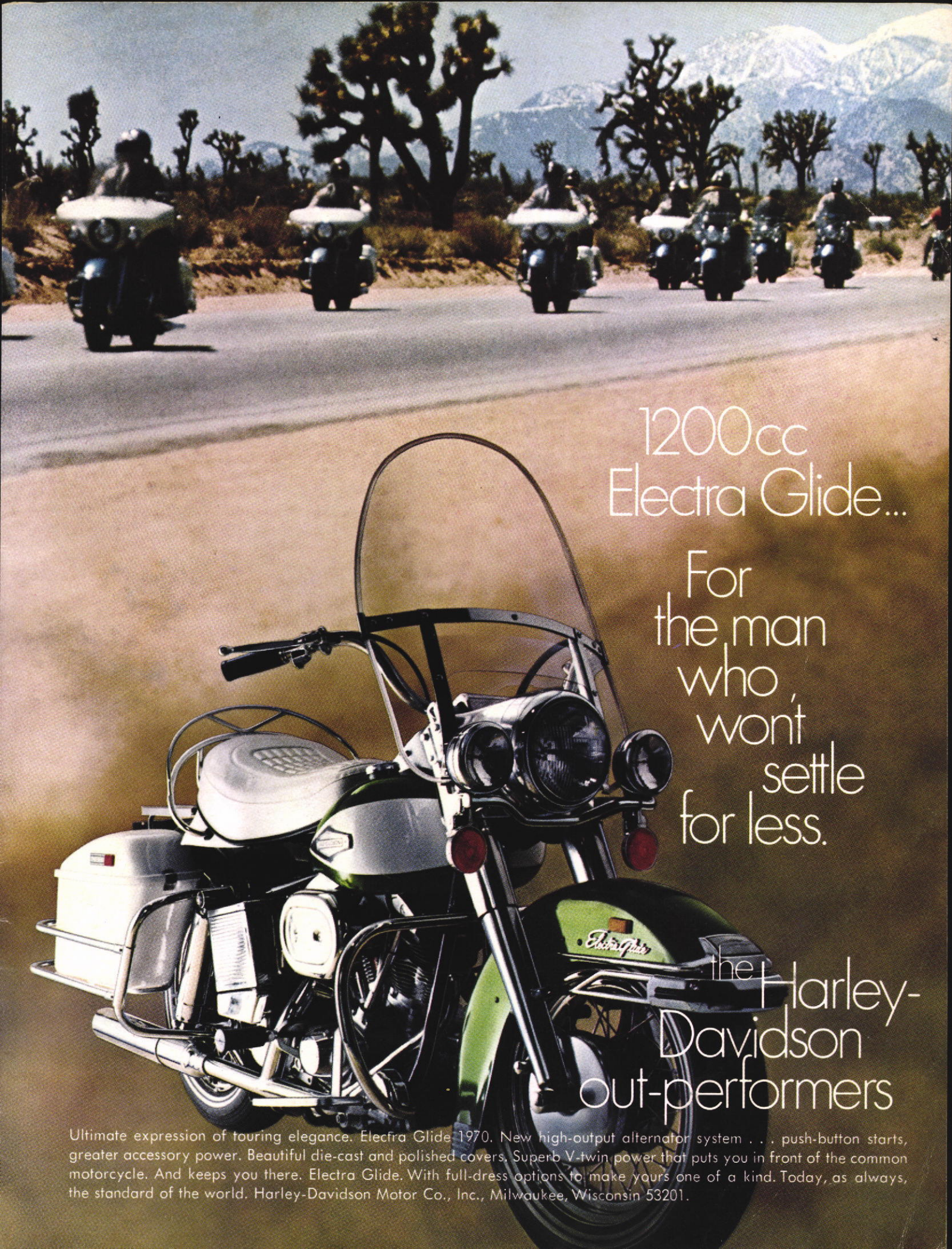
Enclosed Find $_____ For a _____ Year Subscription.

Please Start My Subscription With The _____ Issue.

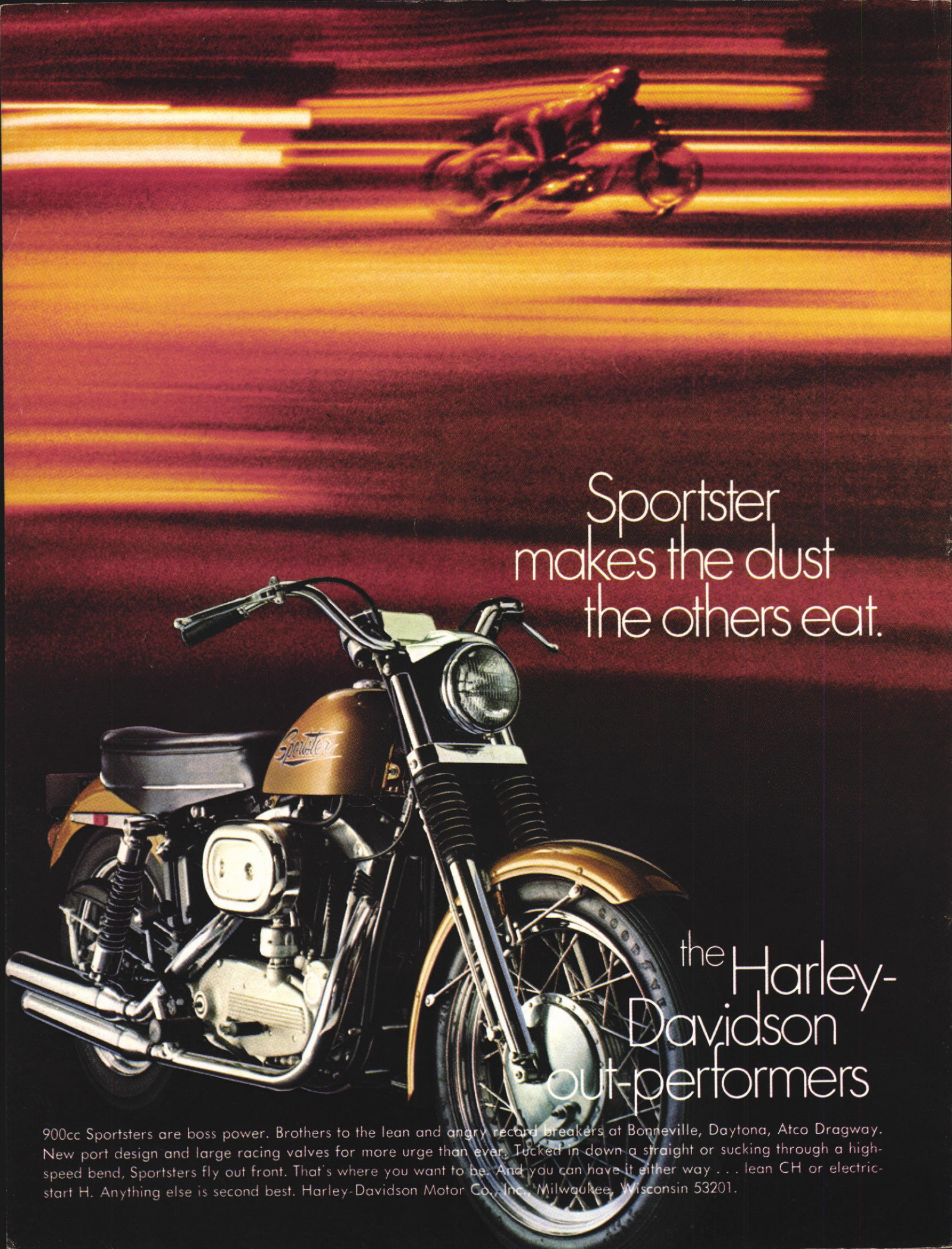
Name _____

Address _____

City _____ **State** _____ **Zip** _____



Ultimate expression of touring elegance. Electra Glide 1970. New high-output alternator system . . . push-button starts, greater accessory power. Beautiful die-cast and polished covers. Superb V-twin power that puts you in front of the common motorcycle. And keeps you there. Electra Glide. With full-dress options to make yours one of a kind. Today, as always, the standard of the world. Harley-Davidson Motor Co., Inc., Milwaukee, Wisconsin 53201.


Sportster
makes the dust
the others eat.
the Harley-
Davidson
out-performers
900cc Sportsters are boss power. Brothers to the lean and angry record breakers at Bonneville, Daytona, Atco Dragway. New port design and large racing valves for more urge than ever. Tucked in down a straight or sucking through a high-speed bend, Sportsters fly out front. That's where you want to be. And you can have it either way . . . lean CH or electric-start H. Anything else is second best. Harley-Davidson Motor Co., Inc., Milwaukee, Wisconsin 53201.

Make this Summer your season to remember.

When the sun moves higher, it's a sign to move out. To a fresh place, a new thing. But you owe yourself something before you go. A stop to see the man. Your Harley-Davidson dealer, one of the new breed of out-performers. He has genuine Harley-Davidson parts, accessories and riding equipment. Neat things you'll find in our 32-page color catalog. Whatever you need to make this Summer one to remember.

Harley-Davidson

Weather's great. Plenty of roads you'd like to ride again. And some you've never seen. So move in style and see the man. Your Harley-Davidson dealer, one of the new breed of out-performers. Tough headgear. Like the new Fastback helmet. Or one of five other styles to suit you and your lady. And neat jackets. Light or medium weight. Live a lot in style and safety. With accessories and riding gear from your Harley-Davidson dealer. He's the man.

Harley-Davidson

AMA news

Berry No Longer Executive Director

THE AMERICAN Motorcycle Association Executive Committee unanimously accepted the resignation of Wm. T. Berry, Jr., Executive Director of the AMA, effective immediately, at their meeting in Los Angeles on April 28th.

Until a new executive director is appointed, the AMA Staff, headed by Garry Payne, Deputy Director, under the direction of President William M. Bagnall, will operate the headquarters office.

Prior to the selection of a new executive director, a re-evaluation of the duties and responsibilities of this key AMA position is being undertaken by the Executive Committee.

The AMA Executive Committee is moving forward with new plans for a greater AMA.

A.M.A. Rescinds Dues Increase

THE Executive Committee of the American Motorcycle Association rescinded the ruling which would have gone into effect June 1st, raising the AMA's annual dues to five dollars. The increased dues would have included a year's subscription to the association's magazine, *American Motorcycling.*

Taking this action in their meeting of April 18, it was the feeling of the eight-man board that the existing program and two-dollar dues fee was adequate for the present, leaving the subscription to the magazine optional.

Executive Committee Repeals 16-Year-Old Rider Ruling

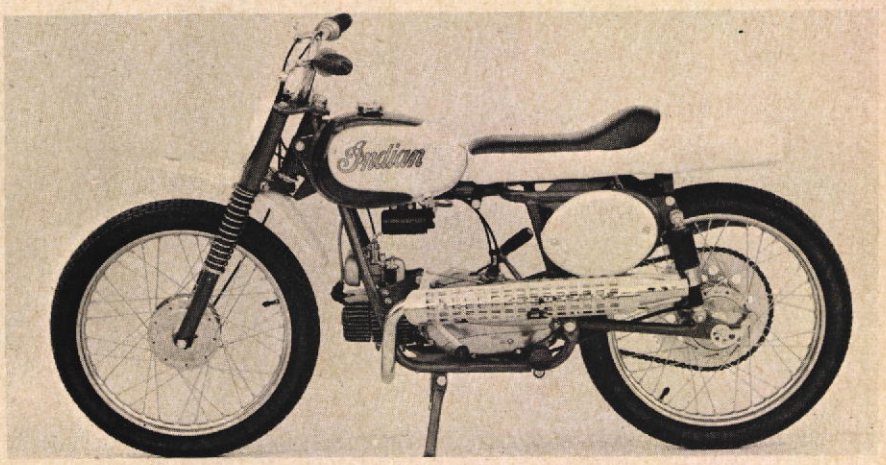
IN THEIR meeting of April 28th, the American Motorcycle Association's Executive Committee overruled action taken by the Competition Congress in their recent annual meeting when a ruling was established which limited a minimum age of 16 years old in motorcycling events where speed was a determining factor.

By deleting this rule, which has created considerable ill-will, the former ruling was

CLEARANCE SALE! — 1969 MODEL

INDIAN BOY RACER PRICE WAS $325 **NOW $285**

F.O.B. Los Angeles



This little beauty fills the gap between mini-bikes and full size motorcycles. Just right for the 8-14 year age group for off-the-street fun. The 50cc Jawa engine with 3-speed gearbox and 45 m.p.h. top speed has plenty of zip for the budding young motocross racer.

Front and rear suspension, large 16 inch wheels and powerful brakes make for perfect handling. Excellent workmanship, attention to details and a fine finish add to the outstanding appearance. Full width finned hubs, flexible plastic mud guards and three competition-type plastic number plates are plus items at no extra cost.

Send for full details and brochure.

FLOYD CLYMER

MOTORCYCLE DIVISION

222 N. Virgil Ave.,Dept. M-7
Los Angeles, Calif. 90004
Tel.: (213) 388-5119

Dealers: Write for special discount offer on this real deal!

NSU Sales, Parts & Service. Complete Engine Rebuilding

B.M.W. SALES & SERVICE

WEST VALLEY CYCLE SALES

20212 Saticoy, Winnetka, Calif. 91306

HARLEY-DAVIDSON

DUDLEY PERKINS CO.

in San Francisco since 1914

Sales, Service—we ship anywhere

Returning Servicemen Welcome

66 Page St., San Francisco (415) 431-5323

MINI-MOTOCROSS!

Saddleback National Championship. Tense day. Hairy track. Hundreds of minibikes set for the guts-up run for first. ☐ Enter Bonanza's new hot one . . . the Mini-Motocross. The big showdown. Mini-Motocross takes 1st and 2nd in the main event. Other Bonanzas finish 3rd, 5th and 6th. ☐ Mini-Motocross! It's got a tougher frame. A new 11 hp that shoves it from 0 to 50 in six seconds. A new Ceriani-type, deep travel fork. Big wheels and knobby tires that bite, corner and cross ruts and rocks that would stop other minis. It's got guts. ☐ See the Mini-Motocross at your authorized Bonanza Fun Products Center. Or send 25¢ for brochure—or $1 (refundable) for full scam.

BONANZA®

Dept. M-7 1775 S. First St., San Jose, Calif. 95112

EXCITING MAIL-ORDER ITEMS FROM HODAKA!

1.
Hodaka Gravel-Rash 1970 Calendar
Full of laughs . . . for the cyclist . . . and anyone else with a funny sense of humor
$2.00

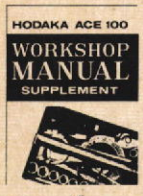
HODAKA IRON-ON SHIRT DECALS

2.
"RED BARON"
in full color.
Approx. 8½" in dia.
25c

3.
"TULE TIGER"
in full color.
8½" in dia.
25c

4.
"HODAKA"
in blue & red
(for formal occasions)
8½" in dia.
25c

5.
"HODAKA RULES"
Poster in Full Color.
Make great wall hanging 23" x 29"
$1.00



6.
HODAKA WORSHOP MANUAL
with supplement for Ace 90 and 100.

7.
"Hodaka Story"
booklet. Complete story of Hodaka, from early design to present.
25c

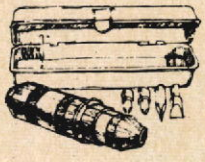
8.

AVON
Motorcycle Fairings
We have a large inventory of all types of fairings at close-out prices. Write type of motorcycle to be fitted and type of fairing desired (handlebar or full fairing). Complete details of available models in stock will be sent by return mail.

These Hodaka Accessories Are Available Through Your Hodaka Dealer!

SAFETY DECAL
From Scotch-Lite printed in black, red, and silver. 3" dia.

HAMMER DRIVER
Gets out those hard set or corroded screws. Complete with 2 conventional and 2 Phillips tips.



FIBREGLASS FRONT FENDER
Made especially for Hodaka and other cycles using Kayaba forks. Complete with mounting clamps.

HODAKA JACKET PATCH
Sewn in Hodaka colors: Red, Gold, and Black. Fine quality Swiss embroidered. 3" dia.

Please send the following items and/or information. I have enclosed a check or money order to cover cost of items checked.

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8

Name_____

Address_____

City_____ State_____ Zip_____

Mail to: PABATCO, Box 327, Athena, Oregon 97813

reinstated *(1969 rule: Sportsman Rule Book, Page 2, Chapter 11 – Riders and Eligibility, section A. General, paragraph No. 3; No rider under 21 years of age may compete without the duly notarized consent of parents or legal guardian.)* which requires parental consent, not only for those under 16, but for all minor age competition riders. It was felt in making this change, that the decision should rightfully be the responsibility of the parents.

Revised National Point Standings

THE AMA's Executive Committee took action, April 28, to clarify the intent of the Competition Congress on the method to be used to award National Championship points during the 1970 racing season.

The points are to be awarded according to TOTAL PRIZE MONEY for the entire race meet. All prize monies paid in preliminary events, whether run on the same day or on prior days leading to the championship race, is to be included in the total.

Another system of tabulating points using only that portion of the prize money paid in the championship event has been used in error since the start of this year's championship circuit.

The Committee's action called for the change to be made retroactive from the first 1970 National Championship race meet held on February 6th in the Houston Astrodome.

COFFEE BREAK With The EDITOR

Continued from Page 4

enjoyed a revival right after the war, which lasted for a few seasons, but took a nosedive in the early fifties. But now it's coming back, and evidently stronger than ever. Don't miss seeing such an event, if the opportunity presents itself.

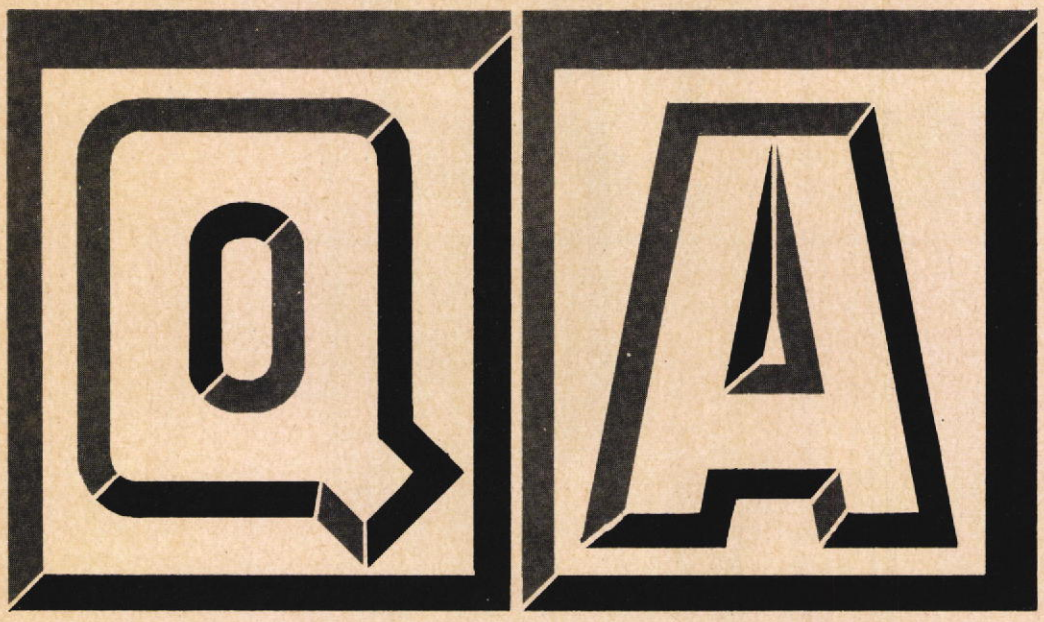
Pocketful of Notes . . .

The forthcoming Pikes Peak Tour, August 4th thru 6th, is shaping up into a bigger outing than last year, according to the tour sponsor, Bill Manning. This is one tour that I'd like to take in some time.

Los Angeles County motorcyclists will soon have a 300-acre commercially developed playground for themselves and their dune buggy compatriots to ride around in. Known as Indian Dunes, the park is located in the Saugus-Newhall area.

As if we didn't have enough trouble already, one motorcycle club has offered crusader Ralph Nader access to what is claimed to be substantial evidence that a major motorcycle manufacturer allegedly has dangerous defects in its products, and that these defective units have not been recalled, at least by the date of their news release. How much nicer it would be to solve such problems among ourselves, rather than holler to the likes of Nader.

Introducing the 1970



MANUAL of MOTORCYCLE MAINTENANCE

21ST REVISED EDITION

THE BOOK THAT MAKES EXPERTS OF BEGINNERS
INCLUDES AMERICAN MODELS 1920 TO 1970

GENERAL INDEX OF CONTENTS

PREVENTIVE MAINTENANCE	Pages 9 to 53
QUESTIONS AND ANSWERS	Pages 54 to 125
ADVANCED SHOP PROCEDURES	Pages 126 to 216
SPECIAL TOOLS	Pages 217 to 228
ESSENTIALS OF SPEED	Pages 229 to 242
MILITARY AND VINTAGE MODELS	Pages 243 to 272

THIS GREATLY ENLARGED REVISION OF THIS FAMOUS MANUAL OF AMERICAN MODELS NOW OFFERS:

Over 200 photos and drawings illustrating the answers to hundreds of questions dealing with maintenance, tuning and repairing of motorcycles.

The illustration and description of over 1,200 motorcycle parts.

The listing of over 900 accurate maintenance, tuning and fitting specifications that will assist you in keeping your motorcycle running longer and better.

Over 40 exploded view drawings and photos to guide you in the proper assembly of engines, transmissions, clutches, carburetors, electrical equipment and other components.

The illustration and use of over 130 special tuning and maintenance tools.

Over 260 pages pack-ja

Over 260 pages jam-packed with the most vital mechanical and tuning instructions for the beginner and professional mechanic. Fully authentic: written and illustrated so you can understand it.

All of the above is available to you for ONLY $3. The only rider or mechanic who cannot parlay this modest investment into savings or earnings many times over are the ones who hesitate in mailing the coupon on this page. ACT NOW!

$3.00

FEATURING THE 1970 HARLEY-DAVIDSON MODELS AS WELL AS EARLIER H-Ds, INDIAN AND MUSTANG

published by
BAGNALL PUBLISHING CO.
Box 638
Sierra Madre, Calif. 91024

ORDER BLANK: QUESTIONS & ANSWERS Manual
Bagnall Publishing Co., Box 638, Sierra Madre, Calif. 91024

PLEASE PRINT PLAINLY

ENCLOSED FIND $ —— IN CASH [ ] CHECK [ ] MONEY ORDER [ ] FOR MY COPY OF "QUESTIONS & ANSWERS" MOTORCYCLE MAINTENANCE MANUAL

NAME_____

ADDRESS_____

CITY_____ STATE & ZIP _____

Sport Slants

GRANT WINS AT KENT ON A SUZUKI

SEATTLE International Raceway in Kent, Washington, hosted a two-day AMA National Championship event on April 4th and 5th. A 100 mile "combined" for lightweight motorcycles with experts and amateur racers preceded the 125-mile championship race Sunday, the 5th.

The action got under way Saturday afternoon with a 100-mile combined road race.

Cal Rayborn, San Diego, California, snatched an early lead in the 100 miler to dominate the number one spot thru the entire 45 laps. Rayborn toured the 2.25-mile course in an elapsed time of 1:14:23.00 for an average speed of 81.671 mph. He rode a Harley-Davidson.

Yamaha-mounted Gary Nixon placed second, 24.5 seconds behind Rayborn. In third place was Don Emde also on a Yamaha.

An estimated 15,000 spectators turned out to watch Sunday's 56-lap, 125-mile National Championship event. Showers made track conditions tricky during practice, but by race time, the rain had stopped.

As the flag dropped, Rayborn roared to an early lead and, it appeared that he might repeat his outstanding Saturday afternoon performance. Rayborn was followed by the Suzuki team of Ron Grant, Art Baumann, and Jody Nicholas. Gary Nixon and Yvon Duhamel filled in the fifth and sixth spots.

Rayborn led for three laps, but retired to the pits with engine trouble. Nicholas also retired early in the event.

Ron Grant, Brisbane, California, became the field leader, followed closely by teammate, Art Baumann, also from Brisbane. Grant and Baumann dueled wheel-to-wheel for the lead. Grant led for a total of 42 laps while Baumann led 9 laps.

Triumph-mounted Gary Nixon of Phoenix, Md., and the Canadian Ace Yvon Duhamel had moved to third and fourth positions.

On lap 39, Grant made a pit stop for fuel and Baumann became the leader. Baumann seemed assured of an easy win, but he fell (lap 42). Nixon, then in second, grabbed the lead. On lap 44, Grant regained the lead. Baumann, who fell a second time, managed fifth place.

Second place was closely contested by Nixon and Duhamel. It was Duhamel who finally maintained the runner-up spot with Nixon in third. Duhamel rode a Yamaha. Dave Aldana, Santa Ana, California, riding a BSA, placed fourth.

Grant covered the distance in a winning time of 1:31:03.55 at an average speed of 83.022 mph. Grant's share of lap money and purse totaled nearly $2,000.

AMA 125-Mile Nat'l Championship

1-Ron Grant, Calif.	Suzuki
2-Yvon Duhamel, Canada	Yamaha
3-Gary Nixon, Md.	Triumph
4-Dave Aldana, Calif.	BSA
5-Art Baumann, Calif.	Suzuki
6-Dave Smith, Calif.	Kawasaki
7-Gene Romero, Calif.	Triumph
8-Don Castro, Calif.	Triumph
9- Don Emde, Calif.	Triumph
10-Walt Fulton, Calif.	Harley-Davidson
11-James Odom, Calif.	Suzuki
12-Mark Williams, Oregon	Kawasaki
13-Jim Rice, Calif.	BSA
14-Tom Rockwood, Calif.	Yamaha
15-Mert Lawwill, Calif.	Harley-Davidson
16-Ken Molyneau, Canada	Yamaha
17-John Black, Oregon	Yamaha
18-Sonny Burres, Oregon	Norton
19-Russell Coppage, Calif.	Yamaha
20-Leonard Fortune, Iowa	Matchless

250cc Expert/Amateur 100-Mile

1-Calvin Rayborn, Calif.	Harley-Davidson
2-Gary Nixon, Md.	Yamaha
3-Don Emde, Calif.	Yamaha
4-Yvon Duhamel, Canada	Yamaha
5-Tom Rockwood, Calif.	Yamaha
6-Art Baumann, Calif.	Suzuki
7-James Dunn, Wash.	Suzuki
8-Emil Ahola, Wash.	Yamaha
9-Frankie Juhan, Canada	Yamaha
10-Sonny Burres, Oregon	Yamaha
11-Dan Kirk, Wash.	Bridgestone
12-Gene Brown, Oregon	Yamaha
13-P. M. Kellond, Canada	Yamaha
14-Ron Grant, Calif.	Suzuki
15-Ron Pierce, Calif.	Yamaha
16-Jody Nicholas, Calif.	Suzuki

LAWWILL, HARLEY-DAVIDSON, FIRST AT CUMBERLAND

THE AMA's Grand National Champion, Mert Lawwill, San Francisco, won top honors in the 20-Lap, ½-Mile National Championship event on May 3rd at Cumberland, Maryland. Mert's Harley-Davidson toured the track in a time of 9:06.53.

Dave Aldana (BSA), Santa Ana, California, and Larry Palmgren (Triumph), Freehold, N. J., finished second and third respectively. Lawwill, Aldana, and Palmgren were also the three heat winners with Lawwill turning in the fastest qualifying time of .25:96.

Mark Brelsford (Harley-Davidson) jumped to an early lead at the start of the race. On lap three, Aldana took the number one spot and held it for 16 laps.

On the last lap, Mert Lawwill displayed the true finesse of the nation's best motorcycle racer. Mert had started in the middle of the pack, but by lap 14 he had worked his way to second place, close behind Aldana's BSA. Mert made his winning dash on turn four of the final lap and snatched the victory away from Aldana.

The Cumberland victory was Mert's second championship win of the 1970 season, having also won at Houston in February.

The Cumberland victory moved Lawwill into third place in the AMA Grand National point standings, with 110 points. Mert trails Dick Mann (165) and Yvon Duhamel (117).

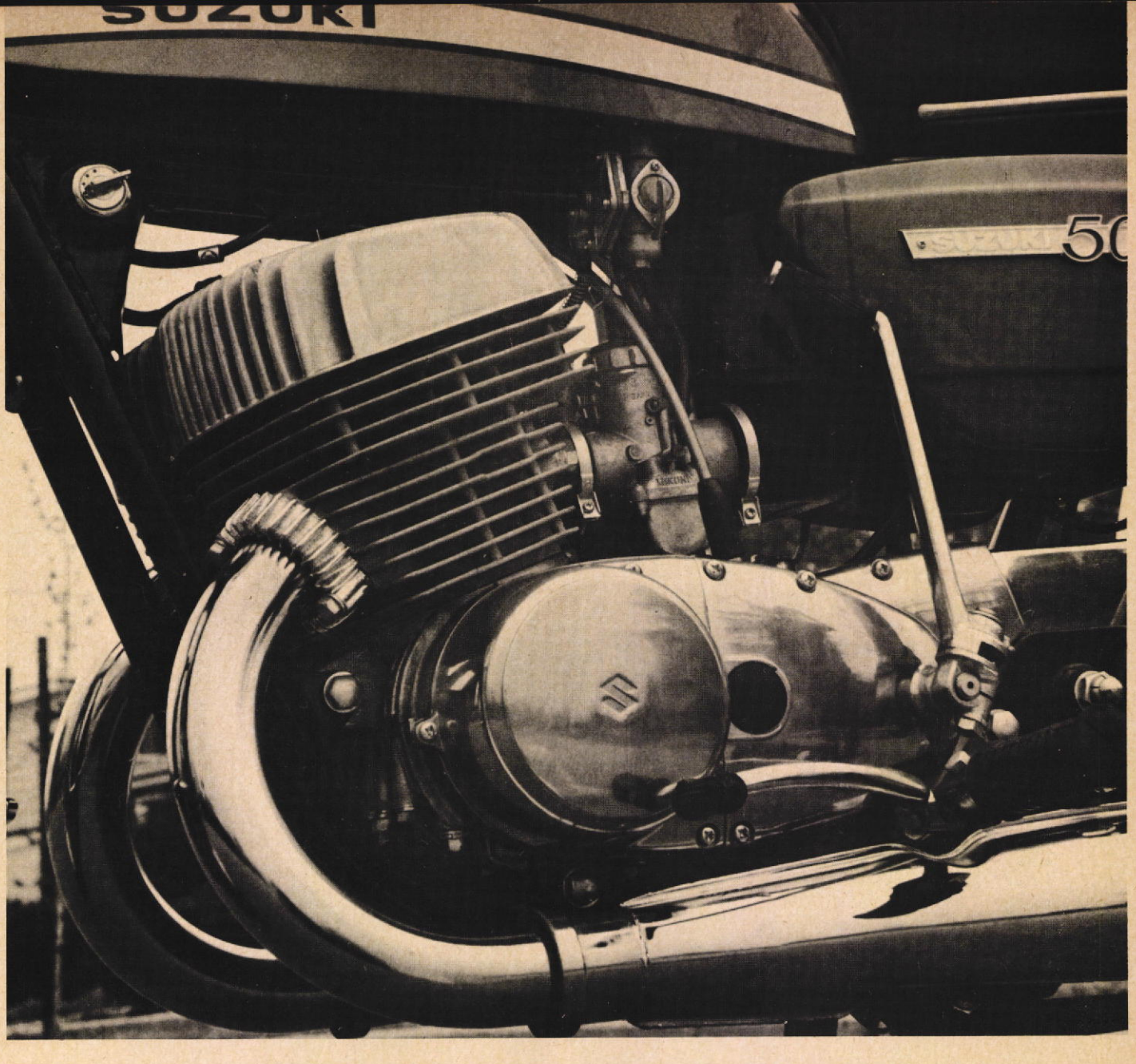
During the Amateur final, Doug Sehl, Ontario, Canada, took top honors on a Triumph. His time for the 14-lap event was 6:19.72.

Second place went to Ron Butler, also on a Triumph.

10-Mile National Championship

1-Mert Lawwill, Calif.	Harley-Davidson
2-Dave Aldana, Calif.	BSA
3-Larry Palmgren, New Jersey	Triumph
4-Keith Mashburn, Calif.	Yamaha
5-Mark Brelsford, Calif.	Harley-Davidson
6-Jim Maness, Georgia	Harley-Davidson
7-Ken Pressgrove, Kansas	BSA
8-Dave Smith, Calif.	Triumph
9-Don Castro, Calif.	Triumph
10-Gene Romero, Calif.	Triumph
11-Dave Sehl, Canada	Harley-Davidson
12-Jim Rice, Palo Alto, Calif.	BSA

Continued on Page 58



SUZUKI T500-II

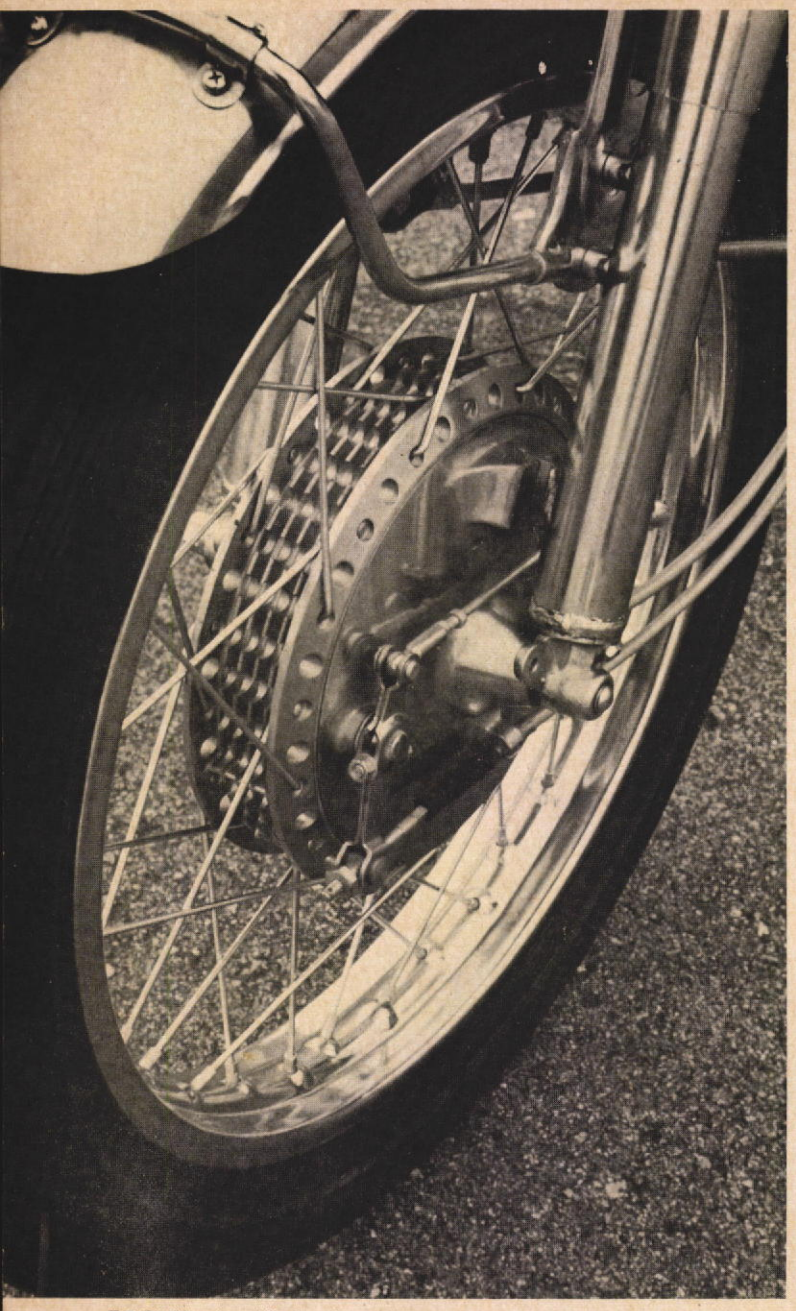
WITH TWO NATIONAL ROAD RACING CHAMPIONSHIPS UNDER ITS BELT, THE 500cc TWIN CYLINDER TWO–STROKE SUZUKI COMES ON STRONG AS A HIGH–SPEED TOURING MOUNT

motor CYCLIST MAGAZINE ROAD TEST

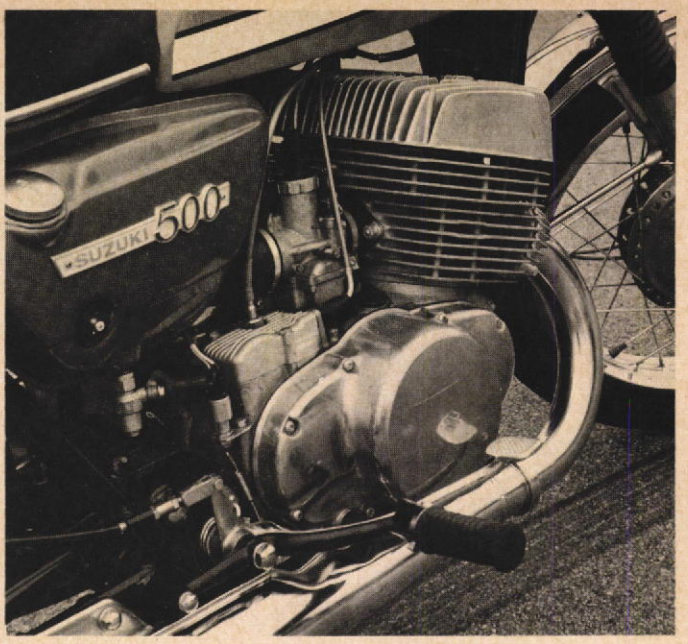
YOU'D BE SURPRISED at the amount of motorcycles that I get a chance to ride each year. They're big ones, small ones, two-strokes, four-strokes, opposed twins, vertical twins, singles, just about any type of machine that you can name.

The other day, someone asked me to choose my favorite motorcycles regardless of price. One of the machines that was right up there on top of the list, was the Suzuki T500-II. I first had a chance to test this model about two years ago. In looking thru my old test report, I found that I really enjoyed the bike. To see just what changes and improvements had been made, I talked Suzuki out of the 1970 model and went out and put another batch of miles on it.

A journalist friend of mine once referred to the Suzuki 500 as the King Kong of the two-strokes, and he certainly wasn't kidding. This bike, when in good tune, will blast thru the quarter-mile in a little over 14 seconds, and it will run 0 to 60 in a flat 3 seconds, time after time. It is a heavy bike, but yet it sure will scoot on down the road when the throttle is cranked on. In fact, if you can't get 110 miles an hour from this bike, there's something wrong with it. The last one I tested turned 112 miles an hour and this one turned a little under 110. For a machine weighing in with gas and oil at 417 pounds, that is not bad at all.



FRONT, double leading shoe brake is amply finned to keep fade to a minimum. Test bike would stop in under 35 feet from 30 mph every time.



HOW about this for a gigantic engine? It displaces 492 cubic centimeters, and cranks out 47 horses at seven-grand.

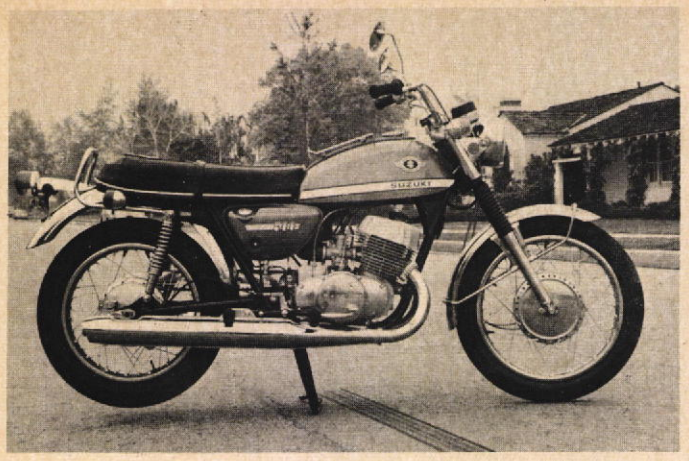
SUZUKI T500-II TEST / Continued

Engine of the T 500 is a gigantic vertical twin, two-stroke, that displaces approximately 500 cubic centimeters (492cc), and is piston port inducted. Corrected compression ratio is 6.6-to-1, and the factory claims 47 brake horsepower at 7,000 rpm. Bore and stroke is 70 mm by 64 mm. This means that the engine will have to be winding in order to gain its full power. Even so, the bike will lug along in fourth and fifth gears beautifully. Torque comes on at an easy 6,000 rpm, and this is 37.5 foot pounds. The two Mikuni carburetors look big enough to jam your boot down, and they almost are, as their bore is 32 mm. As is the case with just about all of the modern Japanese two-strokes, there is no mixing of gas and oil. The automatic cooling system which Suzuki calls Posi-Force, does all the work for you. All you have to do is make sure that the oil tank is filled to the proper level.

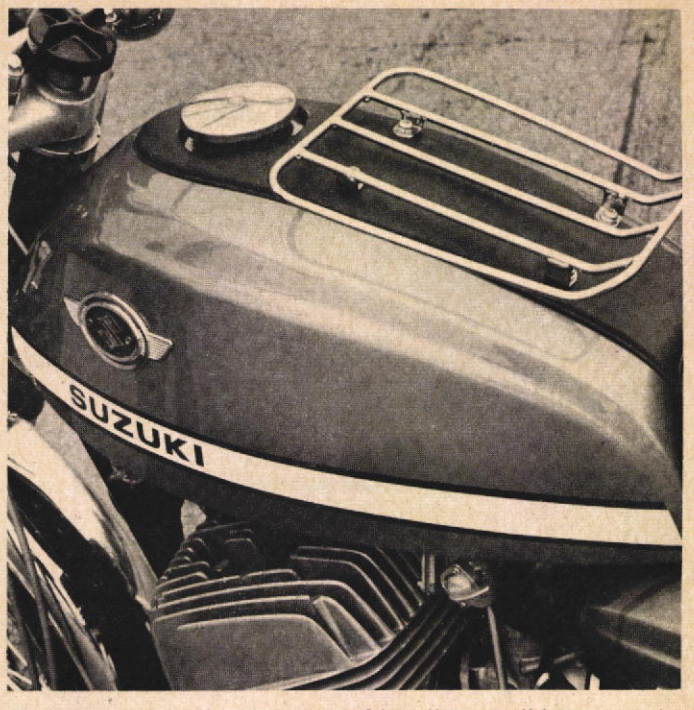
A large wet-type multi-plate clutch gets the power from the engine to the five-speed constant mesh gearbox. Gear ratios are: first 2.5 to 1, second 1.56 to 1, third 1.16 to 1, fourth 0.95 to 1, and fifth 1.87 to 1. In high gear even though chugging along thru traffic, with speeds as low as 30 miles an hour, you can accelerate without shifting, and take the machine up to its top speed of over 100 miles an hour. About the only way that I can describe its acceleration, is to say that it is fierce. If you care to crank the wick all the way up, you can smoke the wheel in either first or second gear without any problem at all. Even in fifth gear, at 80 miles an hour, if you crack the throttle acceleration is unbelievable. If you can keep the rpm up between 5- and 6-thousand, acceleration has a real snap to it. Anything above that and you are instantly on your way, with revs going all the way up to 8-grand if you care to take it that high.

For average riding conditions, the brakes are more than adequate. The front unit is internal expanding, double leading shoe. The rear stopper is the same size, but of the single leading shoe variety. From stops up near 100 mph, I very much prefer a larger brake, as braking gets a trifle hairy at those speeds. But then, how often do you have to stop from 100 mph? For riding around town, the brakes can not be faulted. Neither unit grabs, and they bring the bike to a rapid, skid-free halt. I found that time and time again, I could bring the big Suzuki to a stop from 30 mph in just 32 feet. For a bike this size, this is darned good.

The electrical system is what we have come to expect on Japanese motorcycles, and the only word to describe it is excellent. Both ignition and lighting runs off a large 12-volt battery. Ignition is by two coils and a contact breaker system. Lighting is superb. The headlights throw a sharp crisp beam at night, and the tail-light is what I've always wanted to see in the way of rear lighting. About the only angle that you *can't* see the tail-



LOTS of bike here, but real quick. Still the "King Kong" of the two-strokes.



ATOP 3-gallon gas tank is one of handiest small luggage racks around. All you need to tie on a lightweight parcel is a length of bungee cord with a hook at each end.

light from is the front, as it is high, and protrudes way out beyond the bike. I am not saying that it is the prettiest tail-light set-up around, but it certainly does the job that it is supposed to do. The big Suzuki is also fitted with a set of turn signal indicating lights that do their job as they are supposed to do. It is tough enough to pull up to a stop light, all the while shifting down, clutching, and braking without trying to find a spare hand to signal with. With my test machine all I did was flick a switch either to the left or to the right, and the lights did the rest. The horn could be louder, but yet it has a very sharp crisp sound, and does attract the attention of landbarge owners, so I really can't complain about this.

I also felt that the suspension on the T 500 was excellent. It's standard as far as suspensions go, telescopic front fork, and swing arm rear, but it's nice to know that everything is working the way it was designed to work. The front forks don't clunk, cannot be made to bottom, at least with my weight, and the ride is soft and smooth. The rear shocks are adjustable just in case you get a chubby girl-friend. The seat is large and fat, and this in conjunction with the excellent suspension, makes for a superb ride.

One thing I mentioned on the last test and I'd like to mention again, is that the Suzuki is one of the grooviest sounding motorcycles around. I don't mean that it is noisy, because it is not. Muffling is perfect, but induction silencing is not. On any other bike this would be a fault, but on the big Suzuki it's beautiful.

The big Suzuki is one of my favorite motorcycles, but yet there are some things that I don't dig about it. The center stand still has not been improved since the last time I had a chance to test it. I only weigh 135 pounds, and horsing this monster up on the stand is almost an impossibility. The only thing that saves my stomach muscles, is the fact that this bike has one of the best sidestands around. This I always use. Another thing that I have a gripe about, is the fact that the Japanese hide ignition switches and light switches in some of the weirdest places. Like many other Asiatic bikes, the ignition is stashed forward of the left cylinder, up underneath the gas tank, and completely out of reach unless you are stopped, have your feet on the ground, and have a chance to lean down to see what you are doing. Why can't this simple little switch be moved up on to the headlight nacelle, as on many other motorcycles? The tires fitted to my test bike were good, but at the same time they weren't. Both wheels were fitted with a street tread, and seemed all right for most riding, but yet here in California, especially in the mornings, the streets are damp with either fog or dew. The moment the streets got wet, those neat street tires got as slippery as owl feathers. It seems that a bike that cranks out almost 50 horsepower should have just a tiny bit more in the way of tread on the tire.

I've told you what I disliked, so I will tell you also what I like. Vertical twins have never really turned me on because many of them have a tendency to vibrate. For commuting back and forth to school or work, this really isn't noticeable, but yet under long distance touring conditions, it is quite noticeable. At low rpm, I really can't say that the Suzuki is any different but yet this is not a motorcycle that is meant to be run at low rpm. The moment you get up above 3-grand on the easy-to-read tachometer, there is not a trace of vibration. This I really liked. I also dug the Suzuki gearbox set-up. Gears are spaced just the way I like them, and the gear change mechanism works as easily as the proverbial hot knife thru the quarter-pound of butter. Never once during the time I had the test bike shown on these pages, did I encounter any shifting difficulties at all. Large displacement two-strokes have always suffered from gas mileage problems, and in many cases you are lucky if you can get from one gas station to the next before your petrol runs out. Not so with the Suzuki. Under average conditions, which included a 200-mile trip on the open highway, and then several days chugging around town, overall gasoline consumption ran right around 50 miles to the gallon. This is not bad for a bike, especially a two-stroke displacing 500cc. I think if you wanted to use this motorcycle for riding around town, you should be able to get even better gas mileage.

I liked the way that the T 500 was put together. The frame was sturdy, all the welds looked good, and the paint was perfect. This also goes for the rest of the bike. There is no short-

age of chrome on the T 500, and this gives you some sort of an idea that this particular bike might just have been designed for you, the American buying public. I couldn't find one blemish in the paint job, the castings were perfect, the chrome was good and thick, and the overall finish of the bike was excellent. I can't say more in this respect. Another thing that turned me on, was the vacuum-operated priming position on the fuel tap. If you snap the fuel tap into primed position, the engine stopped immediately, leaving gas in the carburetor. When you wanted to start, all it took was one dab with your foot and the bike roared to life immediately. This is a very handy goodie, especially if your motorcycle has been sitting around for a few days since the last time you used it.

My overall impressions of the Suzuki T500—II were nothing but good. Way in the back of my mind, I've got some ideas of picking up a small lightweight sidecar, and mounting it on one of these machines. I think that this bike would make a real fine sidecar hauler. What I'd also like to do is possibly do a minor hop-up on the internals of this gigantic engine. I don't mean change port timing or anything, but just a general clean-up of ports, possibly raise the compression a tiny bit and just overall get a little bit more go from an engine that I feel already goes like whoopee. If I do get one of these bikes, I'll let you know all about it. About all I can say to finish this test, is if you can get a ride on one do it. I think you'll enjoy it.

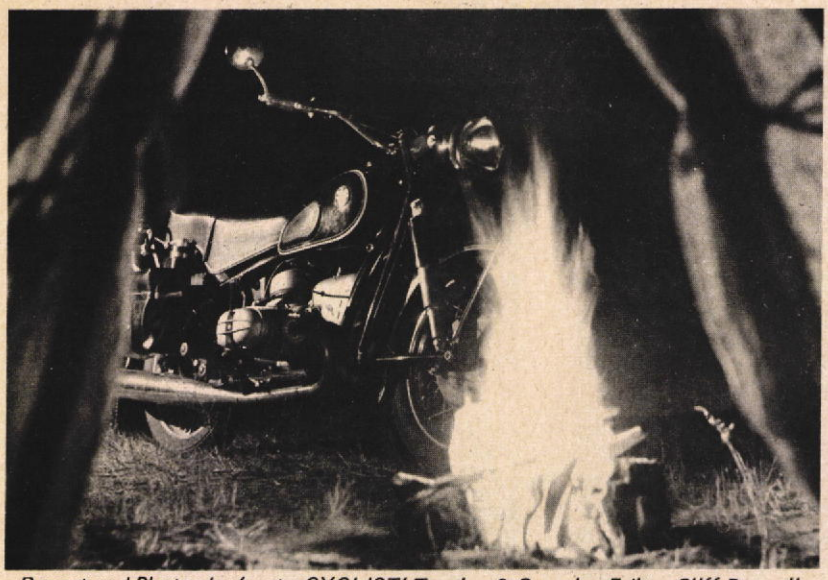
SPECIFICATIONS: SUZUKI T 500 MARK 11

Make	Suzuki
Model	T500—II
Engine	Vertical twin, two stroke Piston port inducted
Engine Capacity	492cc
Bore and Stroke	70mm by 64mm
Corrected Compression Ratio	6.6 to 1
Carburetion	Twin Mikuni 32 mm
Horsepower	47 @ 7,000rpm
Torque	37.5 foot pounds @ 6,000rpm
Clutch	Wet, multi-plate
Gearbox	Five speed constant mesh
Gear Ratios	First: 2.5 to 1 Second: 1.56 Third: 1.16 Fourth: 0.95 Fifth: 0.87
Frame	Dual downtube cradle type
Suspension	Front: Telescopic fork Rear: Adjustable Swing Arm
Tires	Front: 3.25 x 19 Rear: 4.00 x 18
Brakes	Front: Double leading shoe Internal expanding Rear: Single leading shoe Internal expanding
Gas Tank Capacity	3 gallons
Oil Tank Capacity	3.2 pints
Wheelbase	57.2 inches
Length	85.5 inches
Ground Clearance	6.3 inches
Weight	417 pounds
Top Speed	110 mph
Price	$895.

ENGINE	Excellent	Good	Fair	Poor	Unsatisfactory
Starting	•				
Throttle Response	•				
Vibration		•			
Noise	•				
TRANSMISSION					
Gear Spacing	•				
Clutch Smoothness	•				
Shifting speed		•			
CONTROLS					
Handlebar position	•				
Ease of operation	•				
Location	•				
BRAKES					
Lever pressure	•				
Pedal pressure	•				
Fade resistance		•			
Directional stability	•				
Stopping distance	•				
SUSPENSION					
Front	•				
Rear	•				
Ride control	•				
Dampening	•				
APPEARANCE					
Paint	•				
Construction and welds	•				
Chrome and trim	•				
ELECTRICAL					
Wiring	•				
Headlight		•			
Taillight	•				
Horn		•			
GENERAL					
Spark plug accessibility	•				
Instrumentation	•				
Side stand	•				
Center stand			•		
Seat comfort	•				
Muffling	•				
Tool storage space		•			

COMMENTS: Unbelievable acceleration. Good brakes. A top speed way over 100. Good gasoline mileage for an engine of this size, especially a two-stroke.

MOTORCYCLE TOURING & CAMPING



Report and Photos by 'motorCYCLIST' Touring & Camping Editor Cliff Boswell

THOUGHTS ABOUT SELECTING A TOURING MOTORCYCLE

SO MANY RIDERS request information about machines that are *suitable* and *dependable* for travel that I am tempted to write a column about the subject. Here goes, and if my neck is sticking out a foot, at least I'm aware of it.

Let me see now, what is meant by dependability?

I take it to mean that a machine is well put together, its parts are made of good quality materials, and the bugs which are typical of most mass-produced mechanical things have been eliminated after extensive testing. One that is *suitable* for a job is more likely to be dependable than one that is not.

A cycle is not good for traveling if its shifting mechanism sticks in second gear (like one I had), if the spokes tear out of the rear wheel (like another), if the throttle is so stiff that it takes two hands to keep it positioned for long hours of cruising, if the gas tank is so tiny that it will hardly hold from one gas station to the next, if it's so damned noisy that it drowns out those infernal jet aircraft flying overhead, or if the headlight won't work, or the front forks bottom at every dip in the pavement. As I see it, a dependable machine is one that can be counted upon to get you there and back with the least amount of mechanical trouble and with the greatest amount of comfort.

Obviously, not all motorcycles are fit for touring, nor are they meant to be. I take issue with some of the advertisements which extol the very questionable touring qualities of small bikes in a misguided effort to increase sales. One rider said that he had gone through three such machines and was so disgusted he did not know where to turn. His request to me was for information which would steer him on the right track in buying a cycle that would perform satisfactorily and dependably in the job he wanted it for.

It gripes me to run across an ad that claims performance from a small machine equal to that of a larger one of the same brand. Maybe it actually does not make an outright claim, but uses a kind of double talk to intimate the same. Then there is this one, "starchy torquer supremely fit for 70-mile per hour touring," describing a 125cc two-stroke.

No experienced motorcycle tourist will pay much attention to this kind of jesting, but a young man (or old) with little knowledge of the subject and a thin pocketbook may go for it. The result is likely to be much disappointment and considerable disillusionment with motorcycling in general.

I mentioned suitability along with dependability. The starchy 125 "supremely fit for 70 mph touring" would be completely unsuited to my type of touring, and even though it may conceivably reach an honest 70 going down grade with a tail wind, I can guarantee that it would not do so uphill with a headwind nor with a windshield and camping gear. This kind of statement stretches the point a bit too far, and lessens confidence in other claims for performance.

Although I have known of several enthusiasts who rode small capacity cycles and scooters on long journeys, even around the perimeter of Australia, the 250cc and under machine is not suited for the hard and fast work usually expected of long distance bikes in this country. In my estimation no machine under the 450cc Honda can begin to satisfy the qualifications for a suitable and dependable touring cycle — and I mean two-strokes as well as four-strokes.

Weight, wheel base, power, capacity to carry touring and camping gear and perhaps a passenger, riding comfort, are qualities that make or break it. The little ones just won't do it.

Fast acceleration from a stop light in first gear or a high top speed are not necessarily the greatest qualities. More important are, how well will it perform at

ONE of touring models that has stood the test of time is BMW, shown here laden with camping and travel gear. Bike is quiet and dependable.

60 mph for ten hours a day? Or, is first gear low enough that its power can be handled in a situation demanding low speed control in a tough situation?

Other important considerations: How do you feel after a day's ride, are you pulverized? Is the back side of your lap numb? Are your arms paralyzed? Do you wish you had taken the bus? Is the engine covered with oil? Is the spark plug (s) fouled? Is the chain slapping against the chain guard after repeated adjustments?

Although the tendency of novice motorcyclists is to start with the tiddlers and work up to the whoppers I am inclined to recommend going the other direction. Of course it's OK to learn to ride on the little ones, but after that, if the interest is for serious touring, let's go big and stay big. By that I mean cubic inches and wheel base. They go together like power and comfort. A comparatively heavy machine with long wheel base and a big engine will ride more comfortably than a light one with short base and a screaming high rpm power plant.

This is the type of equipment I recommended to two young fellows who are getting ready to graduate from an eastern college and embark upon a several month motorcycle trip through North and Central America. Size was one factor they were considering. Others were availability of parts, and, above all, dependability.

I distinctly get the impression that people who want to do some serious touring are suspicious of high performance "sports" machines. Vertical twins are not mentioned as often as some of the others, and the three-cylinder jobs hardly at all. The new four-cylinder Honda elicits some interest, although they apparently are taking a wait and see attitude. Is the fabulous four for real, or will it soon go down the drain like the fine four-in-line engines of the Henderson and Indian, and the smooth Aerial Square 4? Is Honda really interested in promoting this bike to the touring cyclist? I am not sure. It will make a good touring machine, though, if a few bugs are worked out.

The models most often mentioned are Moto-Guzzi Ambassador, H-D 74 and Sportster, BMW, Honda 350 and 450, Suzuki 500 and Kawasaki 500 Mach III (not necessarily in that order.) Any of these plus some of the 650 vertical twins will make good touring bikes if they are utilized sensibly. There are places where I would not want to be stuck with 800 pounds of motorcycle nor even 600. At the same time I like peace and quiet and a good ride. I like to do some off-highway riding as well as pavement cruising; so my choice is not the biggest nor the smallest. I changed brands once because the bike I was riding paralyzed my throttle hand after 2,000 miles to where I thought it was permanently damaged. The cause was vibration through the handlebars, a shortcoming which can be largely corrected by mounting the bars in rubber, but one that I figured should have been corrected in the first place. Now I note that the big Norton twin comes with motor mounted in rubber. Should be an improvement. My vibrating model was not a Norton.

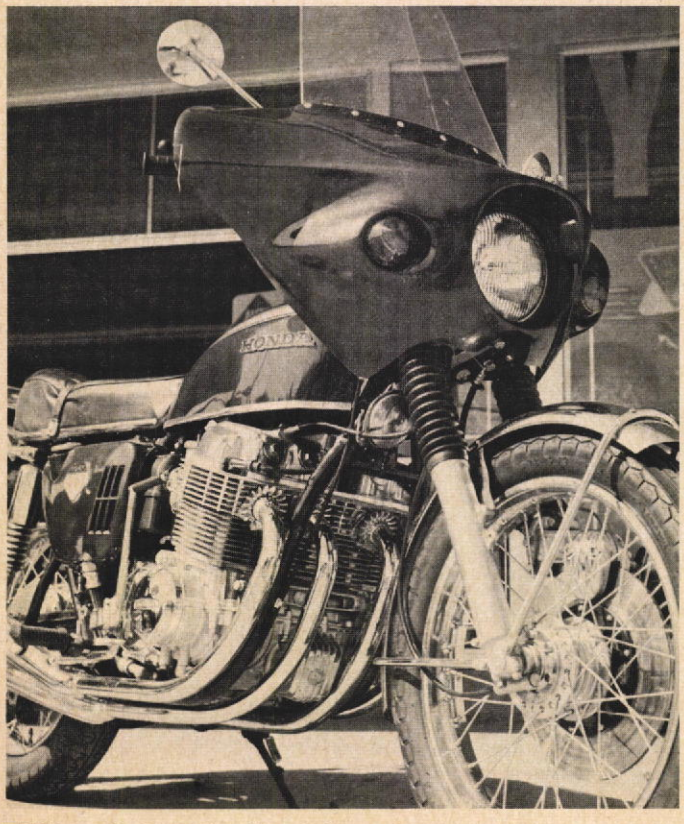
A prospective purchaser of a touring bike will need more information than he can get from a salesman. Unless he is already familiar with the performing characteristics of a particular machine he should take time to increase his knowledge by talking with owners and by actually making some test rides.

Some dealers will take you for a ride, or if you are experienced may let you use a demonstrator for a short jaunt. I suppose this suggestion is impractical, but wouldn't it be nice if dealers in an area got together and set up a course where beginners could practice and buyers could test?

If a dealer does not have a demonstrator, perhaps a friend with the model you want can help you.

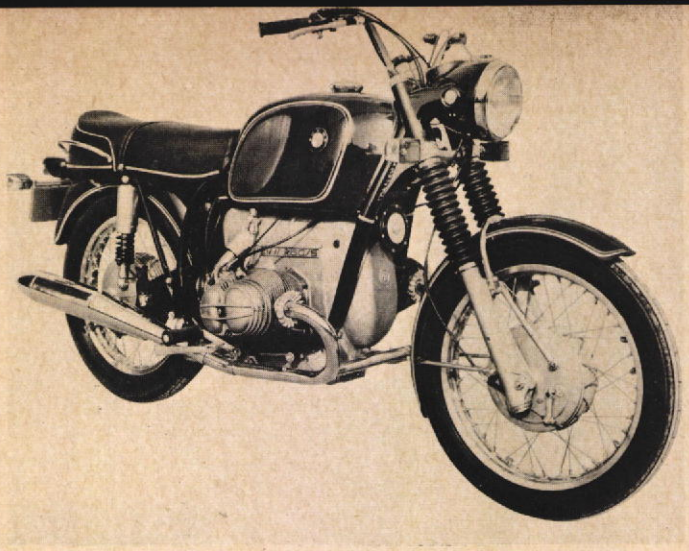
One of the best ways to learn about different machines is to attend a large gathering of cycle riders such as the Indio Tour in California or the Black Hills Rally in South Dakota. There will be no end of opportunities to get first hand information about any number of brands at one of these gatherings and maybe a chance to ride a few. If you already have a bike and are anticipating changing, you might ride

(Continued on Page 60)

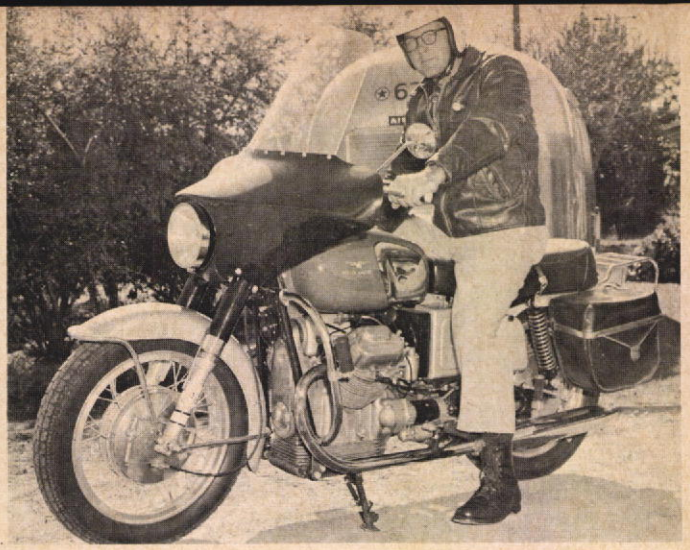


FOUR-cylinder 750cc Honda is coming on strong as one of top road bikes. Wixom Fairing is fitted to this model.

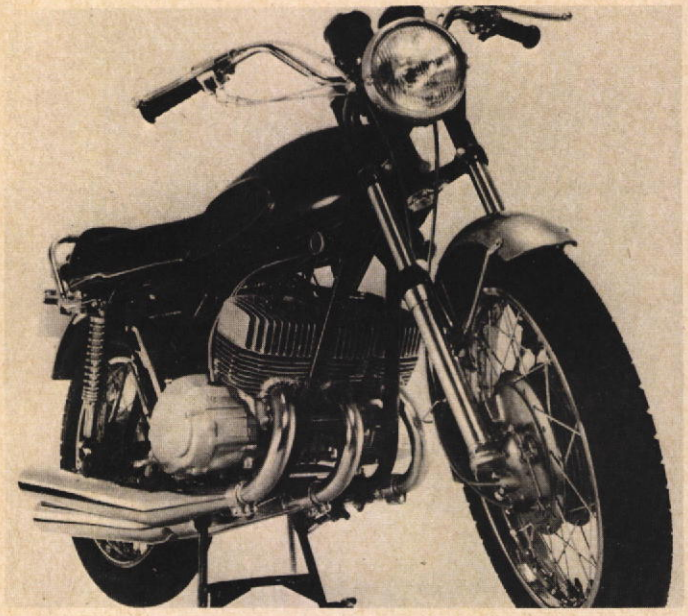
NEW 500cc Suzuki, posed by dealer Tony Azevedo, is smooth and fast, with good touring qualities and reasonable price.



LATEST contender from BMW for touring honors is their 1970 series, offered in 500, 600 and 750cc capacities.

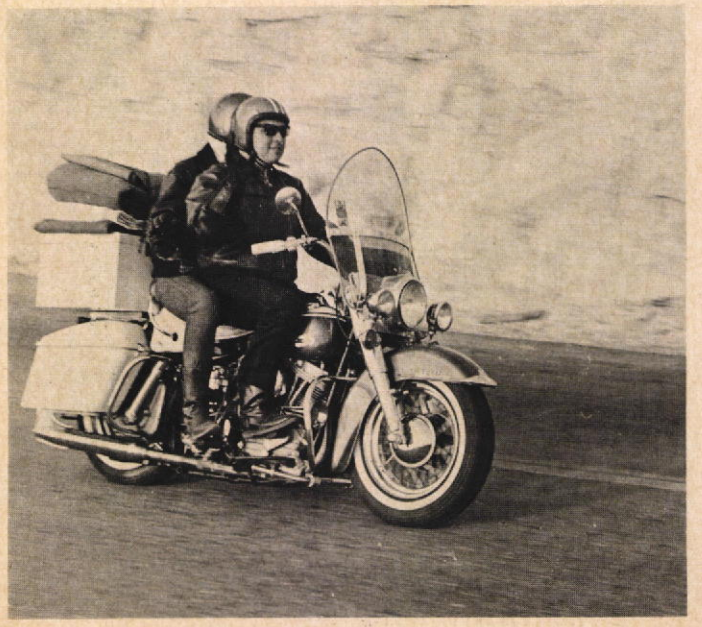


ONE of latest touring machines gaining rapid popularity is Moto Guzzi V750, shown with Wixom Fairing.

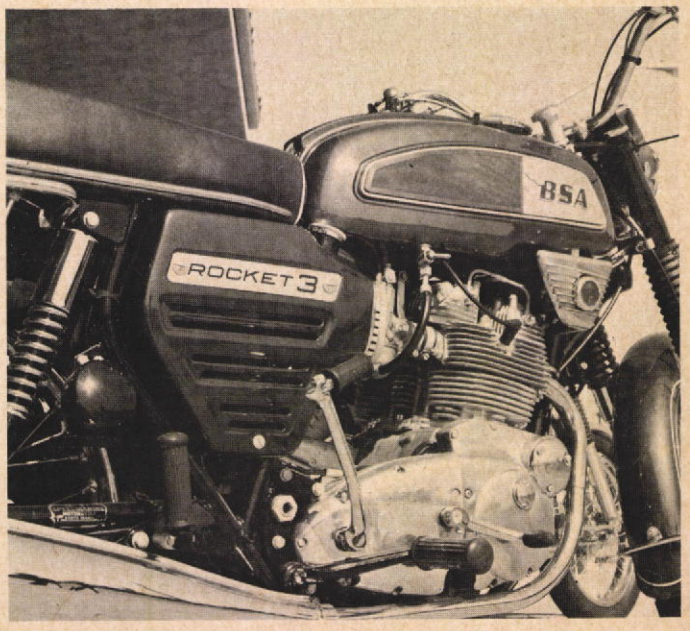


ANOTHER make with a low price tag suitable for touring is Kawasaki's Mach III, a 500cc 3-cylinder 2-stroke model.

WORLD traveler Paul Pratt, from England, uses 650cc Triumph, with Avon Fairing and standard gearing for his travels.



CLAIMED by many to be "King Of The Road" is Harley-Davidson's Electra Glide. (Earlier Duo Glide shown here.)



FOR those who like more than two cylinders, BSA offers their Rocket 3, a 3-cylinder 750cc overhead valve model.

YAMAHA '70

WITH NO LESS THAN 17 MODELS, YAMAHA FOR 1970 LOOKS BETTER THAN EVER

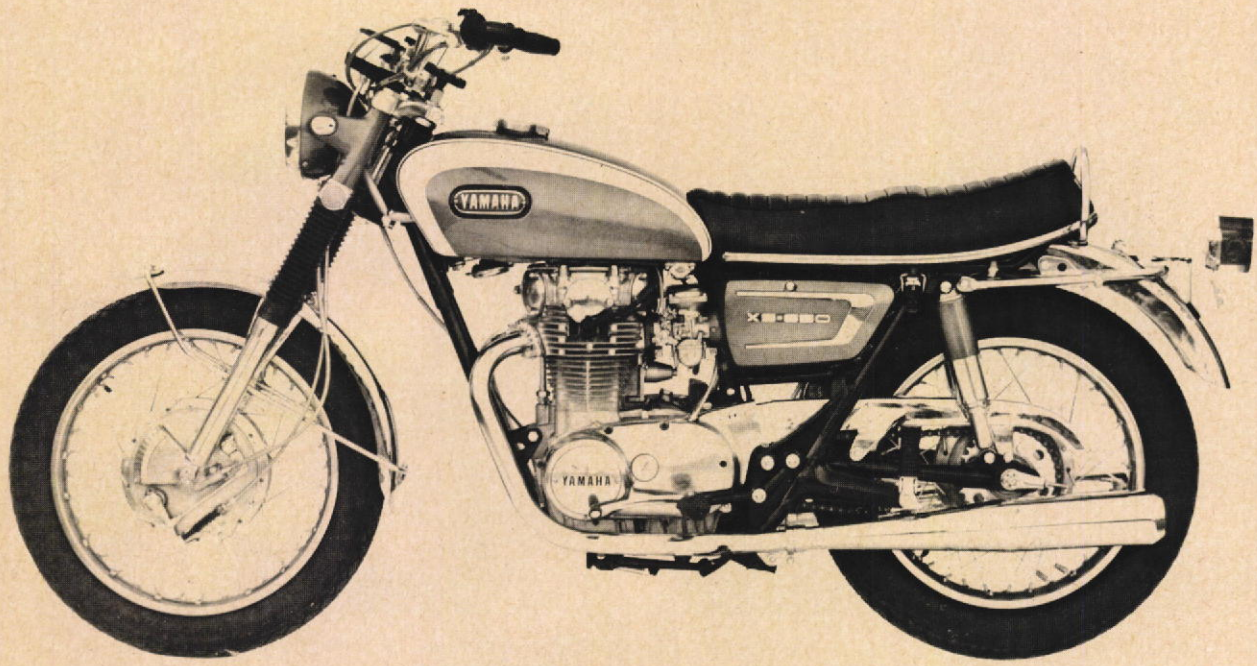
YAMAHA, celebrating their 10th anniversary in the United States, recently announced their 1970 range of motorcycles.

Consisting of 17 different models, the 1970 Yamahas span from 90 to 650cc. All are of two-stroke design with the exception of the largest bike in the line, the brand-new 650cc SX-1, an overhead valve twin with a five-speed transmission, built in-unit with the engine, as on all Yamahas.

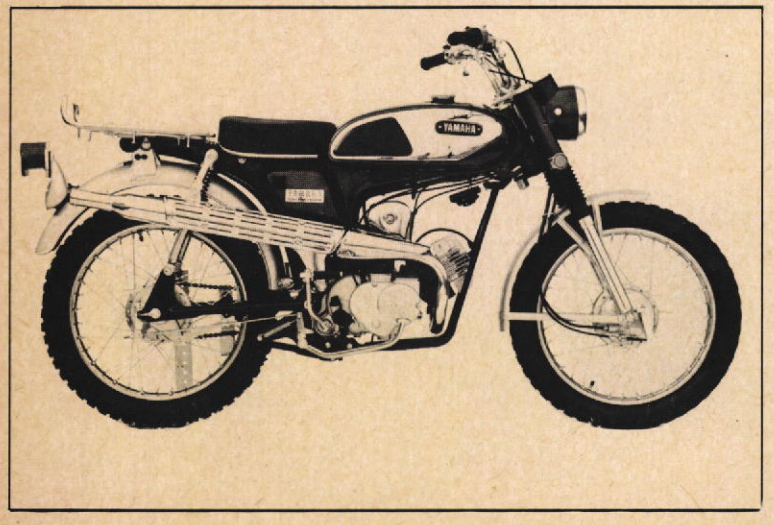
For the serious sports competition rider, there's a trio of Moto-Cross models in 125, 250 and 360cc capacities. The same basic configuration, only fitted with lighting, makes up the Enduro range, which also includes a 90 and 175cc model in addition to the three previously mentioned capacities. Rounding out the true off-road models is the 100cc Trailmaster, the L5T-A.

Yamaha's street range, in addition to the 650 XS-1, consists of the 350cc R5, the 250cc DS6-B, the 200cc CS3C, the 90cc HS1 and the 80cc G6S.

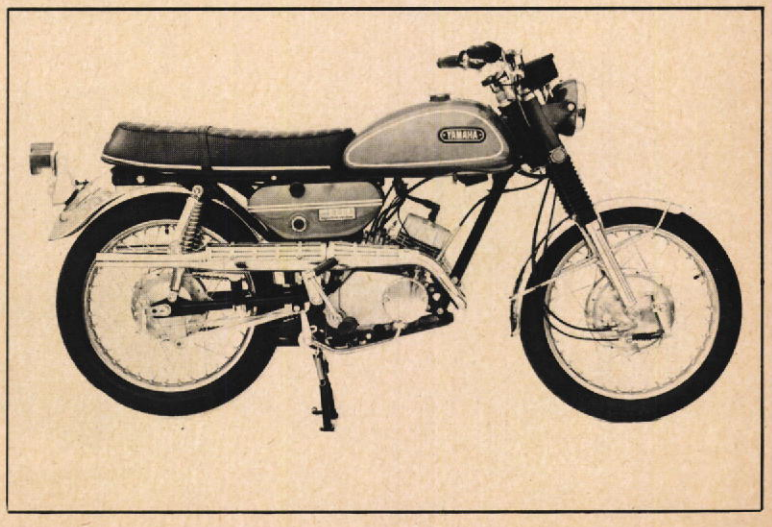
Rounding out Yamaha for 1970 are a pair of all-out road racers, complete with fairings. They are the 250cc TD2 and the 350cc TR2.



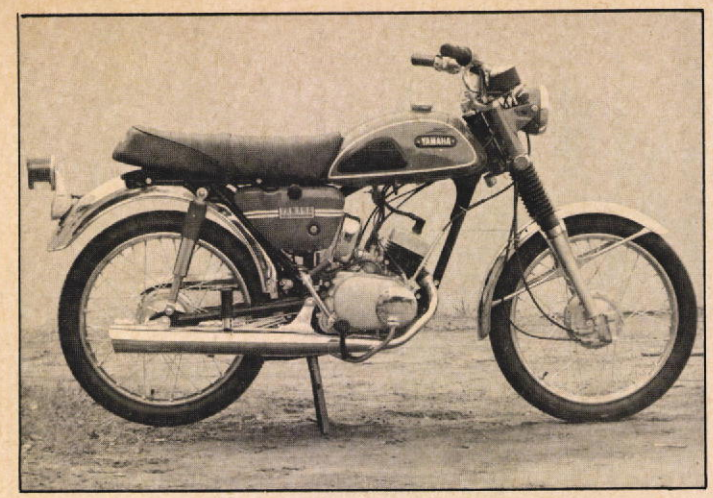
LARGEST of Yamaha line is this 650 XS-1, first overhead valve 4-stroke model from Yamaha. It's a 650cc vertical twin with 5-speed gearbox.



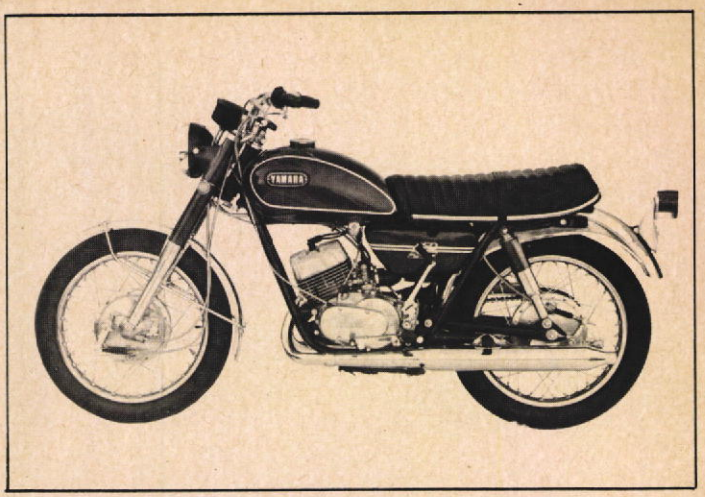
100 L5-TA, a 100cc trail model, features dual ratio drive.



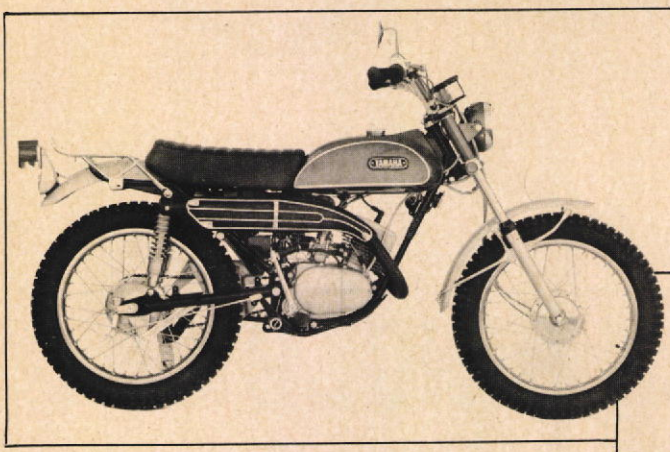
200 CS-3C Street/Scrambler, with 5-speed gearbox, electric starter.



90 H5-1, a 90cc twin-cylinder street model.

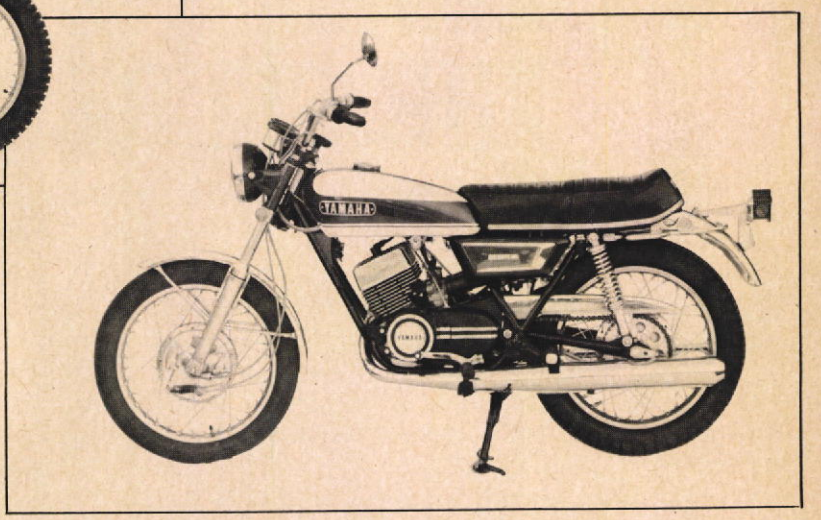


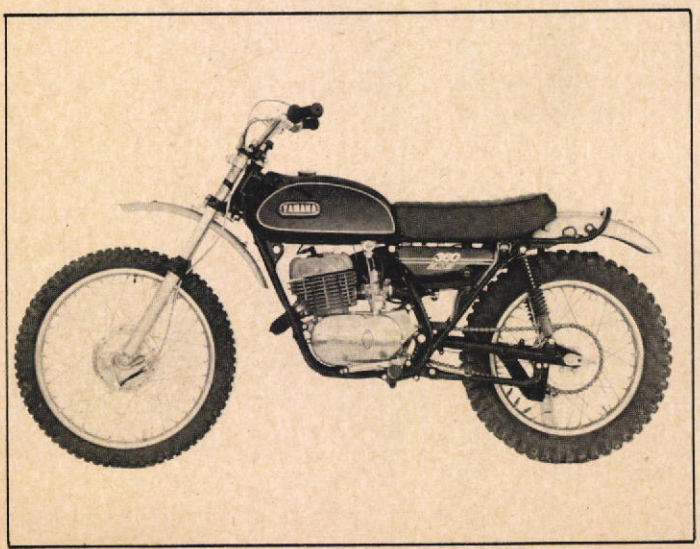
250 DS6-B, a 30 HP, 5-speed 250cc race-bred street twin.



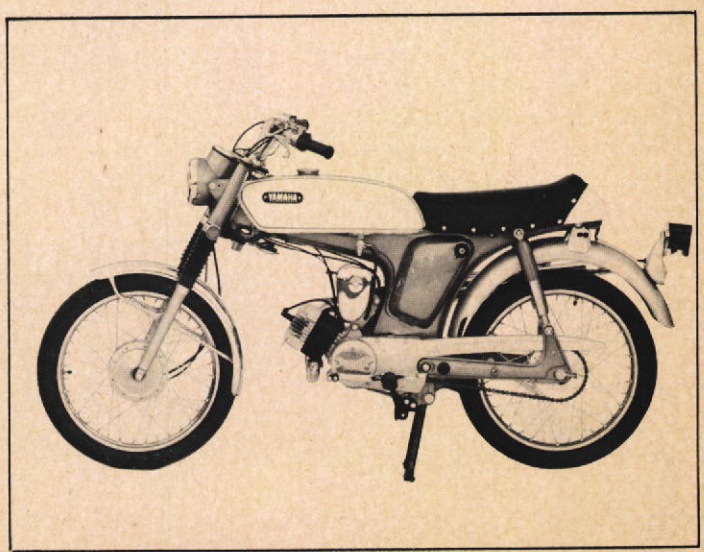
350 R5, a 36 HP, 5-speed street twin.

175 CTI-B, a 175cc Enduro model. Also available in 90, 125, 250 and 360cc.



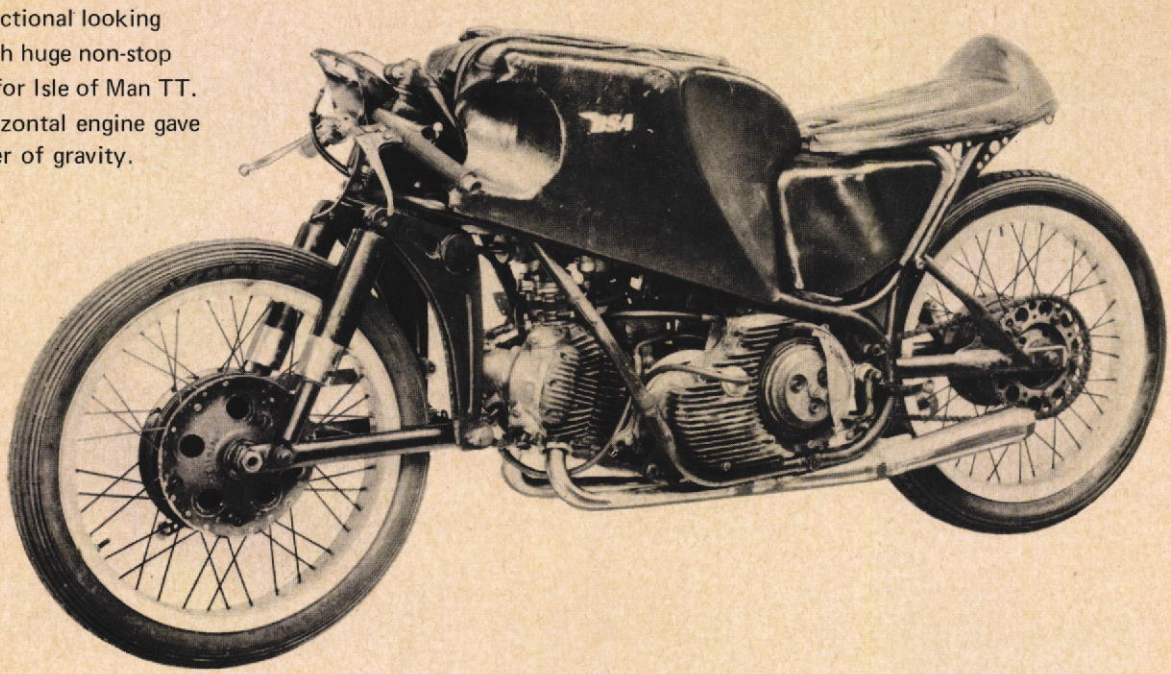


DTIM Moto-Cross, also available in 125 and 250cc sizes.



80 G6-S, a lightweight street model for the newcomer.

THE 1953-'54 works BSA 250 was a functional looking single with huge non-stop gas tank for Isle of Man TT. Near horizontal engine gave low center of gravity.



Photos courtesy "Motor Cycle" magazine, London

THE SECRET SINGLE

THE STORY OF A LITTLE-KNOWN BSA GRAND PRIX RACER

By Richard C. Renstrom

THE EARLY 1950s were dramatic years in the history of motorcycle production. England still ruled supreme in worldwide sales then, but the continental manufacturers were slowly subduing the British on the classical grand prix courses – a move that gave the German and Italian marques the sales lead by the middle 1950s.

England fought back gamely during these years, so that the international road racing scene was terribly competitive on a truly international basis. The pace of design evolution was naturally very rapid during this era, so that many unique, colorful, and fascinating machines were raced during the 1950s. All of this sales and racing activity caused the classical grand prix events to mature into fantastic spectacles, and immense crowds up to 500,000 people were known to view some of the more popular events during this era.

This tremendous interest in road racing motivated many manufacturers to enter official "works" machines in the world championship series, since a big win gave a company a great amount of prestige and publicity. This fame helped sell bikes, of course, so it is no wonder that this era had more manufacturers making a serious attempt at racing than ever before or since.

One of the companies that became interested in the grand prix game during these years was BSA – a marque that has rarely shown any interest whatsoever in building a pukka road racing model. Only once before, in 1921, had the British concern ever built a genuine racer, and after all six of their OHV 500cc singles blew up in the Senior TT the company took a dim view of any racing program.

The first indication that BSA was considering reversing their "no race" policy occurred in February of 1953, when the *Isle of Man Times* carried the news thatGeoff Duke hoped to ride a very interesting British model in the Lightweight (250cc) TT race. The "Secret" British 250 never made the starting line for the 1953 TT, nor did it appear for the 1954 event or any race after that. In fact, it was not until many years later that the full story of the BSA works racer became known, and even today the company isn't eager to discuss the subject.

In designing a 250 to trounce the world's best the BSA engineers certainly had their work cut out for them, due mainly to the rapid technical development that was occurring then. In 1952 and 1953 Moto Guzzi won the Isle of Man Lightweight TT events at 83.82 and 84.73 mph, and these horizontal OHC singles were known to churn out 27 HP at 7500 rpm and run 109mph. The Guzzi's forte was a light weight and low center of gravity that made it a great handling bike in cornering, and a powerful set of brakes helped make it a superb road racing machine.

An even more frightening competitor was the NSU Renmax twin that won the 1953 and 1954 World Championships. The NSU did not handle quite so well as the Guzzi, but it was substantially faster. In 1953 the six-speed twin churned out 31 HP

and ran 123 mph with one of the new dolphin fairings, but in 1954 the German bomb ran 136 mph with a 42 HP output and a full dustbin fairing.

The only British company that had the courage to enter the 250cc class during this era was Velocette – a marque that had a great legacy of wins behind them in the 350cc class. In 1952 Les Graham had ridden a beautiful DOHC single into fourth place in the TT at 82.06 mph, and in 1953 Sid Willis finished fifth on one of the 110 mph singles. After these fine showings the British gracefully bowed out of the 250cc class – forever.

BSA was, therefore, faced with a formidable task, yet their design was so brilliant that one cannot help but wonder why they did not proceed. Geoff Duke was, without any doubt, the world's greatest rider then, and his interest in the project should have been enough to encourage the company to get their racer onto the grid.

The bike itself was very interesting, and even today the engine would offer great potential in a modern frame on all but the fastest courses. The basic design was a near-horizontal short stroke single with a four-valve radial head and geared overhead camshafts. This cobby looking engine was then mounted in an unusual frame with a leading-link front fork, and a special set of brakes were built that would look good even today.

When the news item appeared in 1953 the engine had been undergoing bench tests for several months, but the frame was not ready for the June TT. The following year Duke entered a "GDS" in the Lightweight TT, which was, in reality, the BSA 250 single. This publicity was not wanted by the factory, so the company quietly shelved the project.

The BSA racer was first sketched out in 1949 by chief engineer Bert Hopwood, but Doug Hele then took over the actual designing and production work. Doug's first change was to turn the camshafts at right angles to the original scheme and substitute shaft and bevel drive for chain drive. These mods improved the air flow over the head and facilitated installation of the twin carburetors.

The next step was to build the head, which was quite a challenge then since four-port heads were virtually unknown. A dummy head was first made that had two inlet tracts that were capable of being rotated, and flow tests were then carried out – the result being that parallel intake ports were used.

The decision was also made to have a short stroke engine, since this avenue leaves more room for larger valves and higher engine speeds. The bore and stroke came out at 70 x 64.5mm, which gave 248.5cc. The short stroke lent itself to an outside flywheel, since the short con-rod would have caused the piston to foul an inside flywheel. Another advantage was the compactness of the crankcase. The engine design work was completed in the winter of 1950-51, and then the toolroom began the construction of a prototype.

Next came the frame, which had a pivoted front fork in Hopwood's original design. At that time telescopic forks were just coming into use on road racing bikes, and many factories were still trying other designs.

In Doug Hele's design the leading-link front fork was retained, but an unusual duplex cradle frame was designed that completely encircled the gearbox. The rear fork was a triangulated affair that used a large Girling shock unit mounted beneath the seat. The idea here was to design a light frame that was extremely rigid and free from twist – prime ingredients for good handling.

The most unconventional item was the front fork, which had a fixed steering column and a rotating steering head. This is, of course, a reversal of standard practice, but it did lend itself well to the pressed steel construction of the front fork.

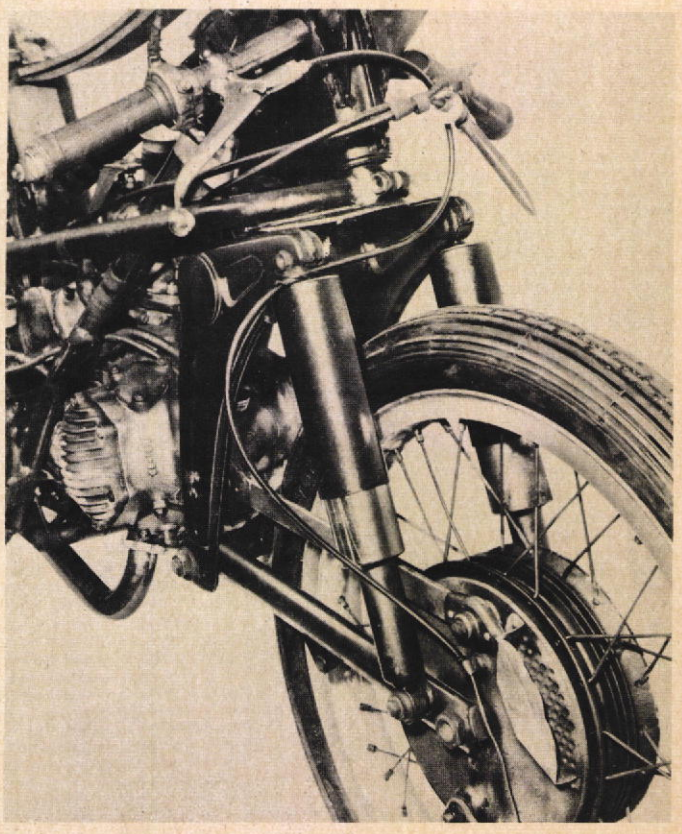
The engine was first bench tested in April of 1952, at which time further research was done on valve and ignition timing. By October the single was churning out 31 HP at 9300 rpm, but further development pushed this on up to 33 HP at 10,000 rpm. During 1953 Moto Guzzi was winning races with 27 HP, and even the heavier NSU twin was getting only 31 horses, so the BSA project certainly looked encouraging at that stage!

The BSA single was turning over much faster than any previous British engine, so it was not surprising that many problems were encountered along the way. One of the biggest problems was the primary chain, which ran extremely hot due to a lack of lubrication. Research revealed that the chain's speed was so high that the links did not pick up any oil internally. Perry Chains were consulted, and they designed a chain with increased clearances – a move that greatly lowered the chain temperature.

Another idea was to design a clutch sprocket that carried oil to a trough cast in the upper part of the chaincase, from where it fell onto the top run of the chain. This idea is presently being used on Triumphs – proof positive that racing does improve the breed!

Yet another move was to enlarge the primary chaincase to hold more oil, and fins were also cast on to help dissipate heat. The clutch was run dry and out in the open where a draft of air could cool it.

While the engine was under development it was also decided



FRONT forks were leading link-type with Girling shock units. Massive front brake was full floating.

to switch from magneto ignition to a battery and coil setup, since the British magnetos that were produced then were not designed for 10,000 revs. The ignition points were driven by a skew gear, as was an auxiliary oil pump that scavenged the cam boxes.

Work on the exciting new BSA moved slowly, so that it was not until the summer of 1953 that Charlie Salt began actual track testing. Further work was done on the racer during the winter, and in May of 1954 Salt reeled off 18 laps at the MIRA test track at a 99.5 mph average. One month later Charlie put in 130 miles at 100 mph without a fairing, which would be a highly respectable speed even today.

The most encouraging performance came in December of 1954, however, when Geoff Duke hurtled around the Oulton Park circuit on the screaming single. Geoff equaled the lap record that blustery day, which gave the BSA comp shop a great deal of satisfaction.

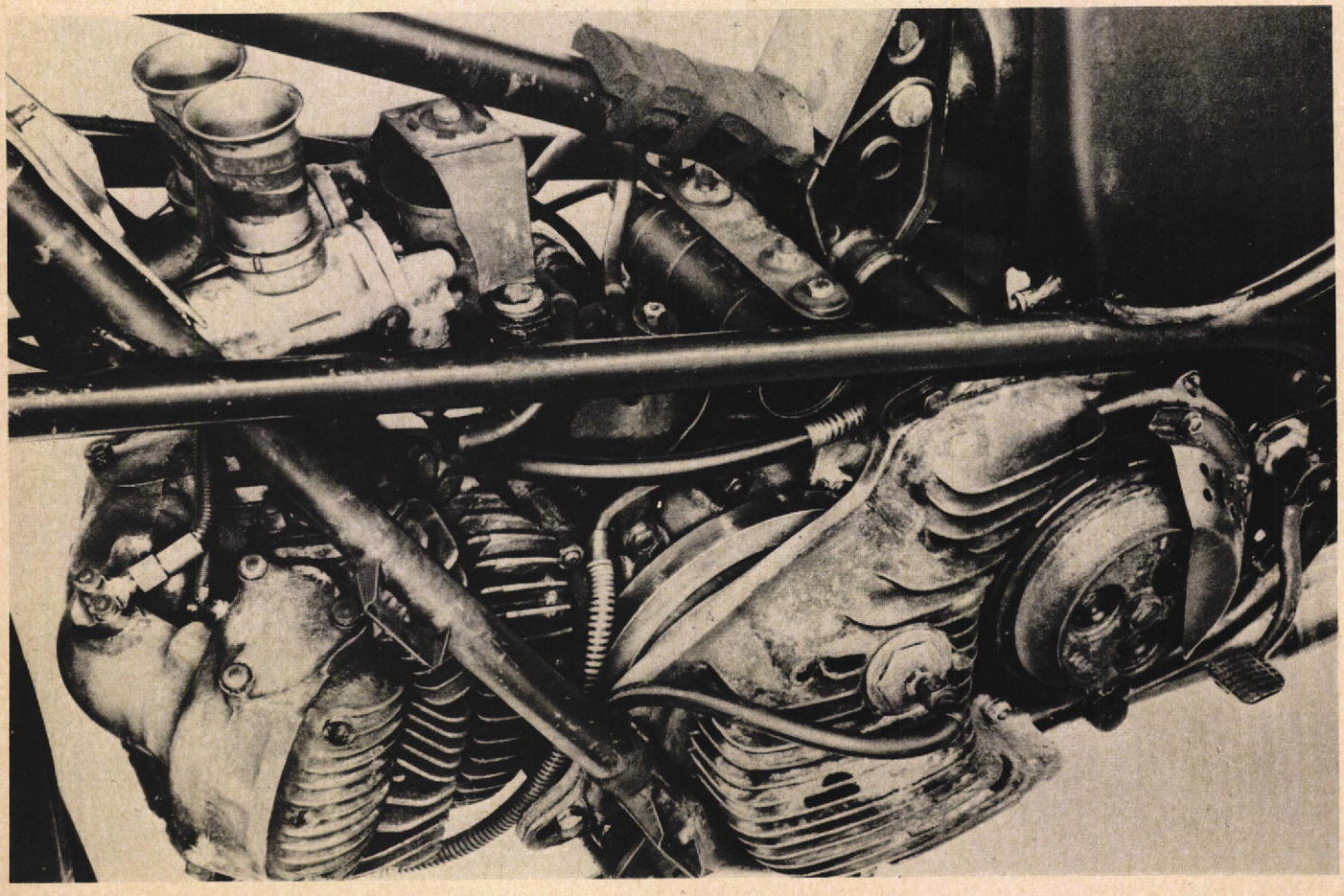
The top management was still not convinced, though, due mainly to their already substantial commitment in other areas. At that time BSA was intensely involved in developing their classical 350 and 500cc "Gold Star" singles, which were fabulously successful in moto-cross, trials, and clubman road racing events. Sales of BSAs were very high then (BSA was the world's largest seller until 1955 when NSU assumed the lead), and the company could therefore see no need to plunge into grand prix racing. The expenses would have been substantial, of course, and the BSA managers had always been wary of pukka road racing since their 1921 fiasco.

The thing that really killed off the project was the publicity that the BSA racer received in the news media. The company wished to keep the whole project rather quiet until they were ready to race, but the fact that the great Geoff Duke was connected with the racer naturally caused a great deal of publicity.

Bert Hopwood was soon called into the managing director's office to get his knuckles rapped for letting the news leak out, and he later said that the future of the racer was on rather shaky ground after that. Development work was allowed to continue at a reduced pace, with a target date being the big Hutchinson 100 at Silverstone in October of 1955.

The bike was ready by then, too, but once again the BSA top brass intervened. Mr. James Leek, the managing director, called the engineers in and gave them an ultimatum – "we go racing properly or not at all. If we race, we have to win. Unless, here and now, you can guarantee that the machine will win, you can put it away and forget all about it."

No designer, regardless of how much faith he has in his design, can ever make such a guarantee, so the cobby little BSA never made it to the starting line at Silverstone. I can also point out that Norton, Velocette, AJS, Gilera, Moto Guzzi, MV Agusta, Benelli, Honda, BMW, and all the other great names in racing would never have made it to the race track had their engineers been issued such an ultimatum. Establishing a great record in grand prix racing takes time, money, hard work, and great patience; and the way to the top is usually strewn with blown engines and shattered hopes.



EXOTIC BSA 250 single used two carburetors, four valves and an outside flywheel, which can be seen behind primary chaincase cover.

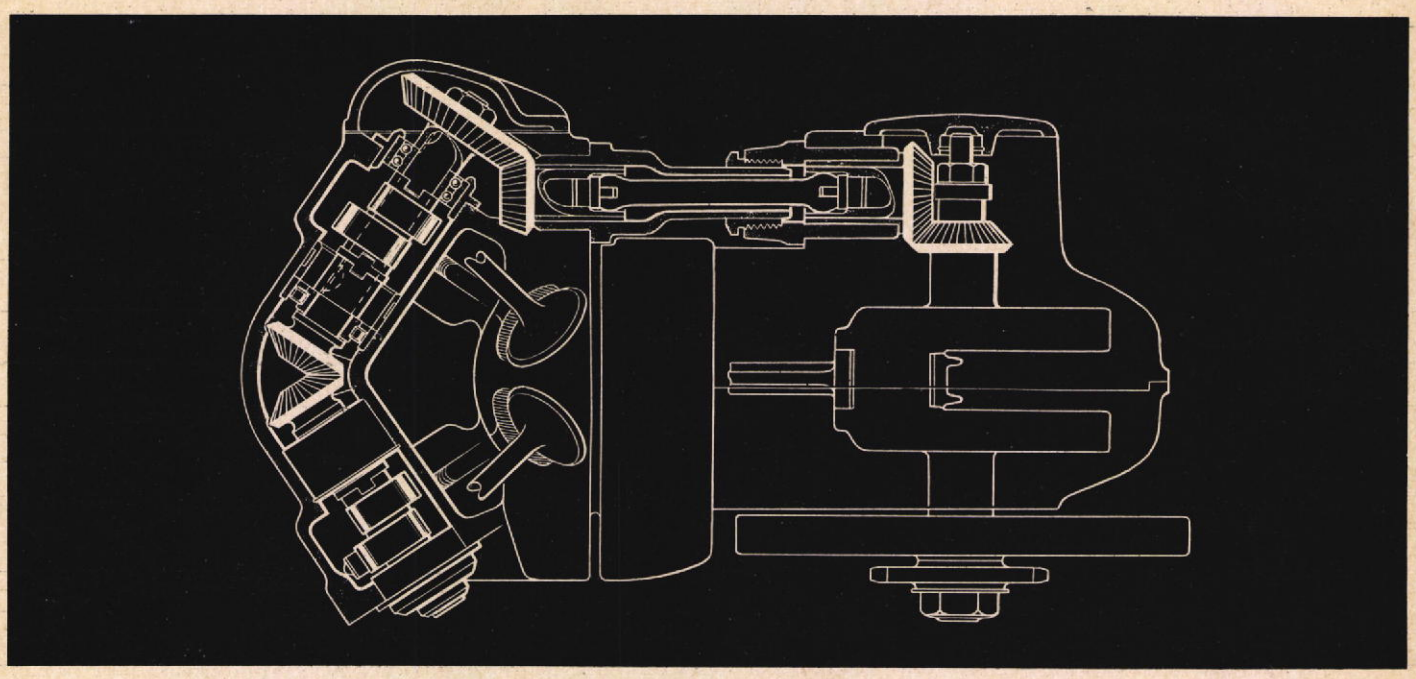
As it transpired, John Surtees took his NSU "Sportmax" into a big lead at Silverstone, just as everyone expected – only to blow the engine into many small pieces. If only the BSA had been there?

Bert Hopwood and Doug Hele are still with the BSA Triumph group, and only recently did they dig the musty old racer out of the shop for the world to see. When asked what changes they would make if they were to revive the single, Hele replied that the valve gear could be simplified a bit, but that the engine design still looked good. Doug would also go for unit-construction, and the gearbox would need to have more than four speeds.

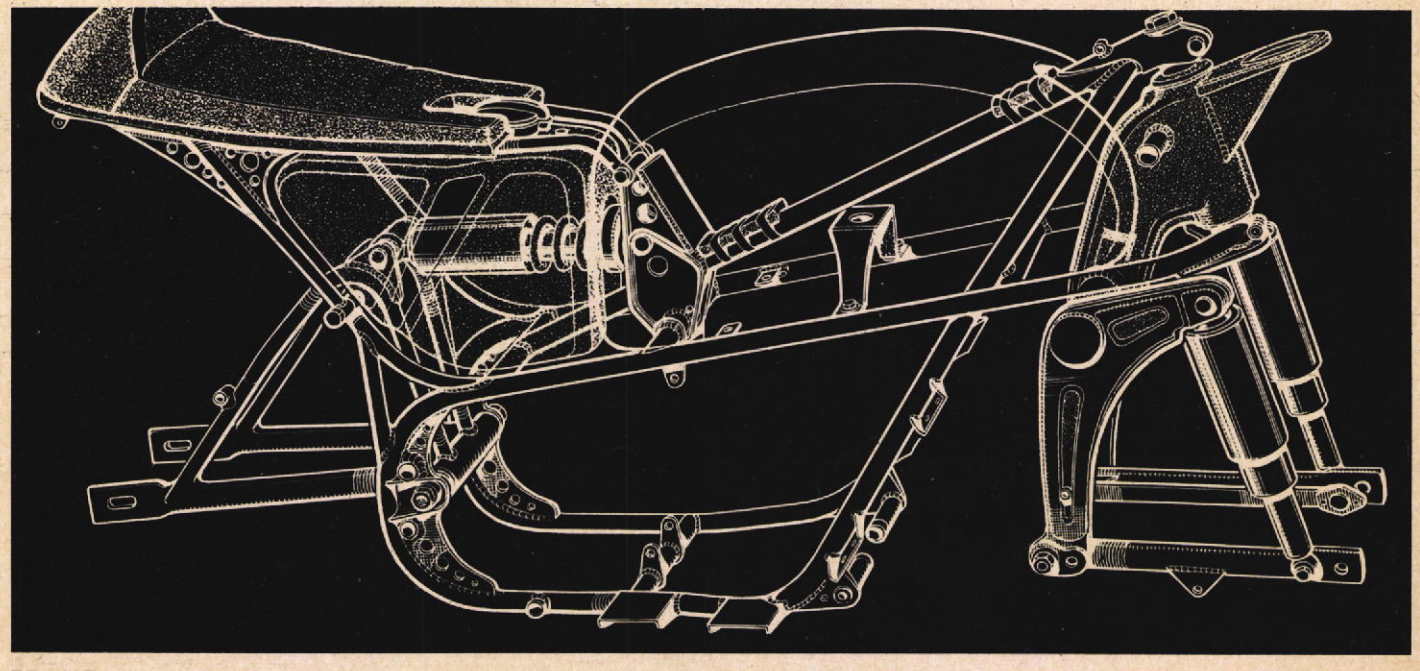
The designers still felt that the frame was as good as any, but a modern telescopic fork would replace the leading-link front fork.

Bert Hopwood hastened to point out that the fuel tank shown in the pictures was not the original, which was an attractive rounded affair. The huge tank shown held around nine gallons and was intended for a non-stop TT ride, and a sleek fairing would have covered the front two-thirds of the machine.

And so ends this tale of a little known BSA – the only genuine grand prix bike that the company has ever built. With its low center of gravity it should have handled very well, and with some further development it could have been a winner on all but the fastest of circuits. If only the top hats had had a little confidence, perhaps the course of history would have been changed?



DRAWING shows radial layout of valves plus drive to camshaft. Each valve was actuated by a short rocker. Valve gear is similar to pre-war Rudge. Rod big-end used plain bearing.

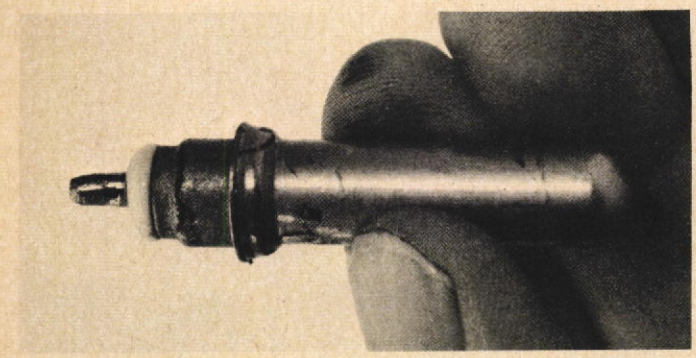


FRAME, designed by Doug Hele, had triangulated rear fork that worked on one large Girling spring-oil shock unit. Front fork had a fixed stem – a reversal of standard practice.

BUILD AN ALARM SYSTEM FOR YOUR MOTORCYCLE FOR UNDER $5

EVEN IF THE HORN BLOWS ONLY ONCE, THE INVESTMENT WILL BE A GOOD ONE!

Report and Photos by Jim Davis



TINY mercury switch is heart of entire alarm system. Shop around, and you'll find one for a couple of dollars.

ASK ANY POLICEMAN around, and he will be more than happy, or possibly unhappy, to tell you that a lock will not keep a burglar out of your house. A lock is nothing more than a deterrent, or a means of slowing down someone who is bent on trying to steal something from you. Stop and figure, if a person were slowed down a tiny bit, someone might possibly see them and call the police. In most cases, this is enough. There is no such thing as a fool-proof lock.

There are quite a few devices on the market at this time that will deter a thief from stealing your motorcycle. These range all the way from gigantic locks and chains, to metal boxes that beep when the motorcycle is moved. They all do the same job, but in many cases they prove to be quite expensive.

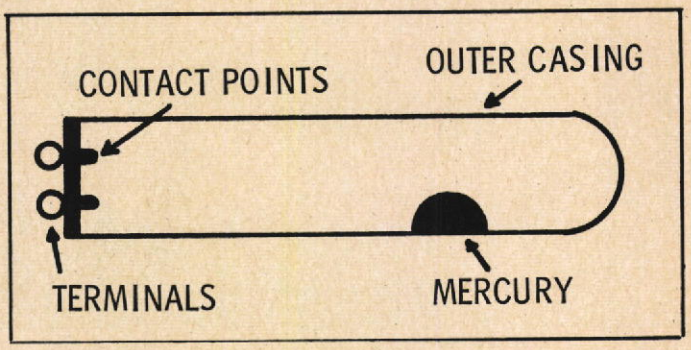
Believe it or not, but there is a method of theft-proofing your motorcycle, that if you do a little judicious shopping, should not cost you more than five dollars at the most. Members of the staff of *motorCYCLIST* have used this over the years on their street motorcycles, and have found that it does work. The entire thing takes nothing more than a mercury switch, a little bit of wire, a lock and key assembly that can be found at any auto parts store, and just a tiny bit of imagination. Let's see how it is done.

We have tried to simplify this article as much as possible, so you have got to look at the photos on these pages, and the schematic diagram along with them. The heart of the entire system is a mercury switch. These can be purchased at almost any electronic or electrical supply house in the nation. If they don't have one in stock, they can get it within a week for you. Switches of this type are used in furnaces, machine shops, and just about any other place you would care to name. But better yet, is the fact that they are cheap. The most expensive one that we can think of probably runs about two dollars and this is even a little bit too ornate for what we are trying to do.

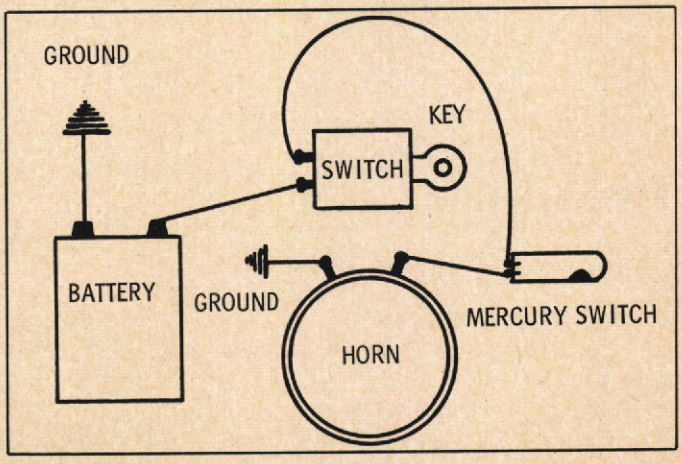
The next thing you need is a small clamp. They are usually made by Garrett or Adel. They can be purchased in most hardware stores or if your local hardware store does not have one, you can usually find one of them in the local surplus store. They are rubber sheathed, and have a couple of mounting holes on them. This clamp will be used for holding the mercury switch in the position that you want it to go in. As for wire, just about any kind of automotive wire will work, as long as it is heavy enough. You are going to need a lock and key assembly. Something like this can be picked up from any of the automotive stores in your area. A junky one will cost about 99¢, and a quality unit will cost about $2 at the very most. You're now ready to go.

A burglar alarm is nothing more than a noise maker. As long as your motorcycle is not being moved, there is no noise. The

Continued on Page 60



WHEN tipped, mercury rolls down the inside, makes contact with points, closing circuit and blowing horn. Mount switch so when motorcycle is resting on sidestand, mercury is not making contact. When motorcycle is set upright, mercury triggers switch.



SIMPLIFIED SCHEMATIC, but one you shouldn't have any problems following. Be sure that all wires are securely soldered. Automotive ignition-type switch can easily be installed on toolbox or headlight.

SACHS 125 ENDURO

LIKE A WELL-POLISHED JEWEL, THE SACHS 125 ENDURO GETS BETTER EVERY YEAR THRU DETAIL REFINEMENTS

motor CYCLIST MAGAZINE ROAD TEST

IF YOU'RE READY to purchase a Trail bike, and you desire a machine with lots of bright paint, a fantastic top speed, blinding acceleration, and the most up-to-date, modernistic styling, the latest Sachs 125 Enduro is not for you. If you want a motorcycle that is reliable, one that can go anywhere within reason, and also one of the greatest trail bikes around, read on, and we think you'll enjoy what we have to say. The Sachs Enduro hasn't changed outwardly as far as we can tell, since the last time we had one almost two years ago, but then if you've got a good product, why bother to change it, if people like it.

Power to make the wheels go round, is supplied by the tried-and-true Sachs engine. This comes in a choice of 100cc or 125cc, and we chose the bike with the slightly larger engine. This well-constructed and also well-known, single cylinder two-stroke engine turns out an easy 15 horsepower at 7,500 rpm. The engine is square, as both the bore and the stroke are 54mm. Compression ratio is 9-to-1. Breathing is through a fairly standard piston-port induction system, and the 24mm Bing carburetor. Leading into the carb, is a very large air box and filter assembly, that does an excellent job of straining out all the dirt and dust encountered in off-the-road riding.

We've always liked the neat little integral 5-speed gearbox on the Sachs models, and the one fitted to the Enduro is no exception. In first gear at 39.99 to 1, if you could get the traction, you should be able to pull out stumps. The other ratios are second: 22.93, third 16.95, fourth 13.04, and fifth 10.78-to-1. The Sachs engine is fairly mild as small two-stroke displacement engines of this type go, and because of this you have to learn to utilize your rpm correctly when shifting. The first three gears are fairly evenly spaced, but then there's a large jump between third and fourth and fourth and fifth, as you can see from the numbers we just gave you. What this means to you is that in the higher gears you have to keep your eye on your engine rpm and keep it within the usable power

A reliable powerplant doesn't mean anything unless the rest of the motorcycle is as good or better. This takes in the frame, suspension, and all the running gear. Without a doubt,

the Sachs Enduro comes equipped with one of the greatest suspensions around. Front suspension is the unusual looking leading link type, with all the moving parts carried on needle bearings. Most suspensions of this type don't have too much up and down travel, as there just isn't much of a way to get it. Not so with the Sachs Enduro, as there is almost a full seven inches of wheel travel. Both sets of shocks, those in the front, and the ones in back, are made by Boge and work perfectly. The springs on the front suspension are progressively wound and those on the rear are not. Rear suspension is a fairly standard-looking swing arm assembly, but what sets it apart from the ordinary, is the size of the swing arm members. As we mentioned, they ride on needle bearings, but yet just to look at the photos with this story will show how big and beefy that swing arm is.

The first of those funny looking little Sachs Boondockers that were brought into the country had a most unusual engine mounting setup. The engine was actually suspended under a large main spine that ran from the forkhead, down to behind the engine. The frames have changed, but yet, that central spine is still there in all its glory. All that's happened, is that Sachs has added two dual down tubes, that run from the steering head on down around and below the engine in cradle fashion. A tubular duplex frame like this looks just about impossible to bend, and as far as we are concerned it works beautifully without any flexing or twisting, even under the worst of riding conditions.

Ignition and lighting are by a Bosch generator-magneto system. On the earlier models of this machine, no battery was fitted, and the generator could more than keep the lights up to par. Since the advent of the new government standards, in order for a manufacturer to sell a motorcycle here in the United States, the rear tail-light must be able to remain lit without the engine running. This, of course, is impossible without some sort of a battery fitted into the system. Someone, somewhere, has fitted this battery, but it certainly looks like an afterthought, as it is just stuck on the left hand side of the bike, hanging out in the breeze. In time, we hope that Sachs puts some sort of a cowl or covering over the battery to make it look a little bit nicer. This was our only complaint with the lighting-ignition system, as everything worked just as we expected it to.

The engine is a first, or at the very least a second kick starter especially with the neat handlebar-fitted choke lever. The lights are bright, and the tail-light is completely visible on the darkest of nights. We don't know why anyone would want to ride a Sachs Enduro on the streets, but if they did, the machine would be completely street legal.

Now that moto-cross is in, the latest fad is to have a 21 inch front wheel. We can remember back a few years ago, when a 21-inch front wheel was a "no-no," and then some of the older members of the staff, like our advertising manager, can remember back even further when a 21-inch front wheel was the only way to go, especially for desert racing. During all the time that Sachs has been bringing the Enduro into the United States, the front wheel has always been a 21 on the larger models. The front tire is a 300x21, and the rear is a 350x18. As you can see by the photos, both tires are fully knobbed.

In an earlier test of another Sachs, the 100 Scrambler, which is basically the same as the Enduro except for a lot more go, we made a few comments on things that we didn't like. One of these was the exhaust systems, that stuck out at an angle and made standing up on the pegs quite difficult. Sachs has cured this by tucking the exhaust pipe up under the gas tank and then bringing it out way in back of your leg.

Another thing we didn't like was the flimsy hinge on the rear of the seat. What made this hinge bad, was the fact that there are no hand grips on the Sachs to horse it out of bad spots, especially on the side of hills, so the only thing you can grab is that nice fat seat. The aluminum hinge was so flimsy, that after three or four sessions of grabbing and grunting, the hinge broke loose from the seat. We are also happy to report that this has been changed, and as far as we can see, it would take a large gorilla to break the newest hinge loose from its moorings.

These aren't the only changes to be made since the bike came out, as the Enduro is very similar to the Sachs Cross Country machine, and as you know the Cross Country has been raced by just about everyone around. Anything that fell off was reported in to the distributor, and they in turn improved the product.

ABOVE: Leading link suspension pivots on needle bearings and features ample length of travel.

ABOVE RIGHT: Sachs Enduro is same style of earlier models, but with detail refinements added thruout.

ABOVE FAR RIGHT: Reliable Sachs 2-stroke engine turns out 15 HP @ 7500 rpm. Exhaust pipe is routed to clear rider's leg when standing on pegs.

RIGHT: Changing throttle cable is quite simple.

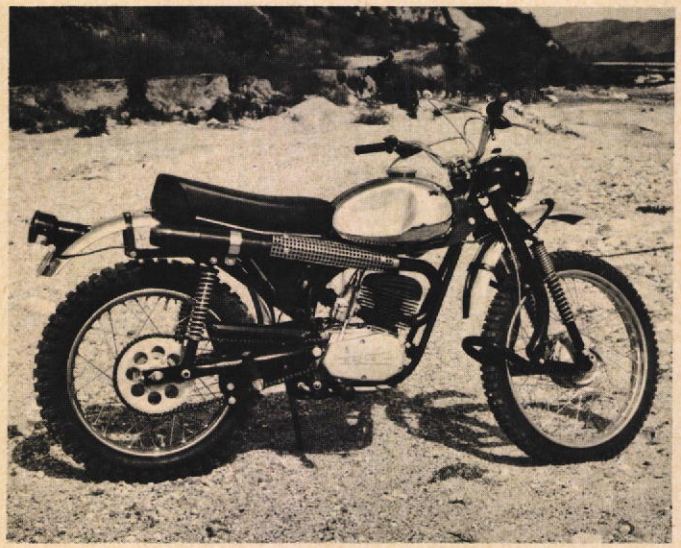
FAR RIGHT: Chain runs thru teflon block, saving wear.

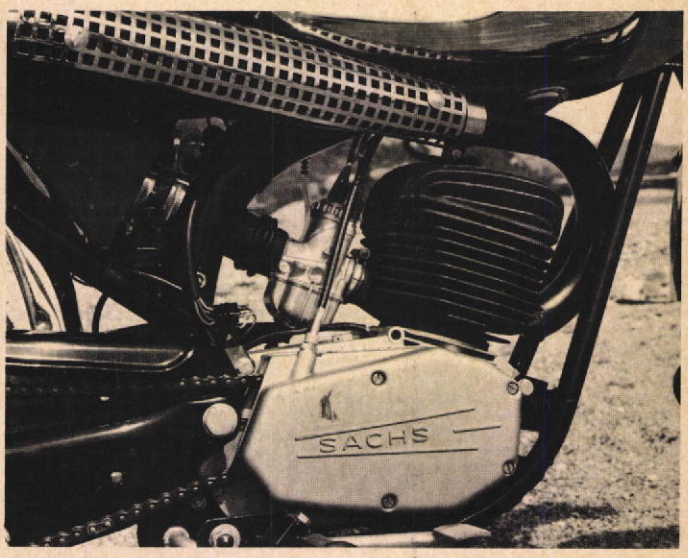
This is another example of how racing improves the breed. The handlebar clamps used to fracture or slip a while back, and this problem has been completely eliminated because of a much beefier and completely re-designed clamp setup. The front tank bolt would sheer off every once in a while, and this has been cured by fitting a much heavier tank bolt. This also goes with the four bolts that hold the sprocket on, as they are much bigger in diameter also.

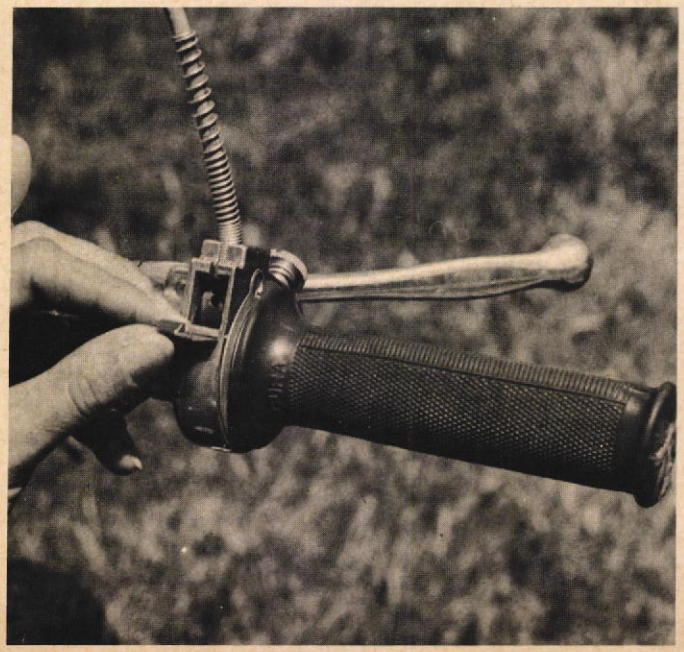
Gearing has been changed from 52 teeth on the rear sprocket to 56, which of course gives you lower gearing all the way thru the range. Even Sachs will admit, that transmissions problems used to be the word of the day, but these have all been sorted out, and then the factory has taken over and completely rebuilt everything to our specifications. Second and third gear are now one piece, and the new piece looks beefy enough to fit inside a truck gearbox. The old shifting mechanism had problems also, and these have all been fixed by reinforcing everything, and making the shifting shaft and the hanger, all one forged piece.

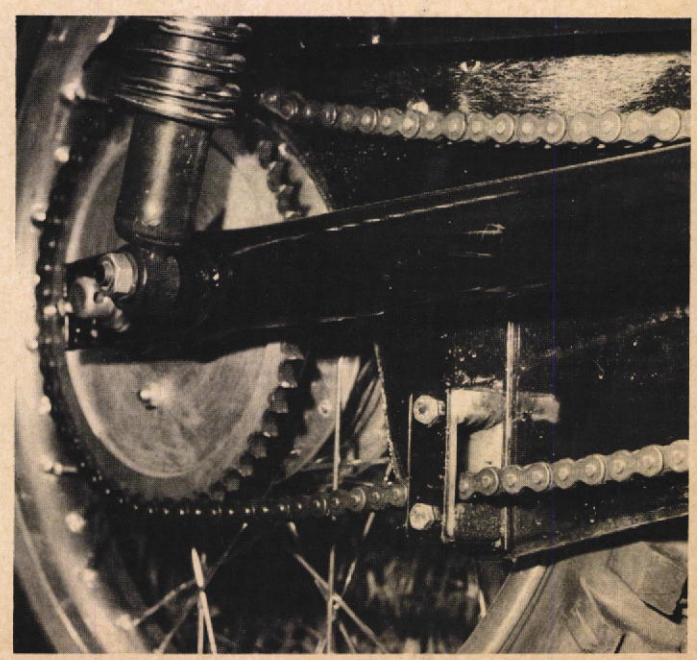
Last, but far from least, the Cross Country engine, complete with sunburst head has been fitted into the Enduro. The Enduro had 12.5 horsepower at 7,500rpm, but the Cross Country has 15 horsepower at the same rpm. Your first thought may be, that the power range may have suffered because of this, but don't let this worry you, as the engine fitted to the original Cross Country bike was far from being peaky, and is probably one of the most docile engines around. Sachs has learnt an awful lot from racing, and even if you're not a racer, you should appreciate this as their motorcycles have been completely improved since they were first introduced, and in turn this improvement has been passed on to you.

There are a bunch of small things that we liked about the Sachs Enduro. One of them is the teflon block that the chain runs through, which acts not only as a chain guard, but also as a means of keeping the chain from flopping around. The teflon, of course, is a lot softer than the chain, so this keeps chain wear to a minimum. Another thing that was groovy was the quick disconnect throttle cable. If you want to disconnect the throttle cable at the handlebar, all you have to do is slide back on the spring that comes out of the top of the throttle, flip back a tiny opening in the throttle housing, push down on the cable, and the cable pops out. This doesn't seem like much un-









til you are out in the wilderness with your family on a weekend, and you fray or break a throttle cable. If you've got an extra along, it only takes moments to replace it. Another unusual point, is that the intake duct for the carburetor is fitted with a clear plastic sleeve, just rear of the large frame bend, and just before the air cleaner box. This doesn't seem important, unless you're interested in finding out whether your air cleaner is bypassing dirt. As long as that plastic tube stays clean, you know that nothing but pure air is being inhaled into your carburetor and engine. The quick-change rear wheel is another thing that will endear this motorcycle to both competition and trail riders. All you have to do, is undo the axle nut, slide the axle out, unbolt the brake strap and cable, and the wheel plunks right on out. Once you know what you're doing, this shouldn't take more than five minutes at the most to do.

It's hard to say exactly what the Sachs Enduro is in the way of a motorcycle. As far as we are concerned, it is a fantastic little trail bike. If you're after reliability, and not brute horsepower, there's no reason that the Enduro wouldn't also be a very fine competition motorcycle. If you cared to, you could leave the lights on for riding enduros, or pull them off for scrambles or hare-and-hounds. No matter what you want to do with the Sachs, or no matter how you want to do it, the price is right, the bike is right, and we feel that it has an awful lot going for it. Give it a try and see what we mean.

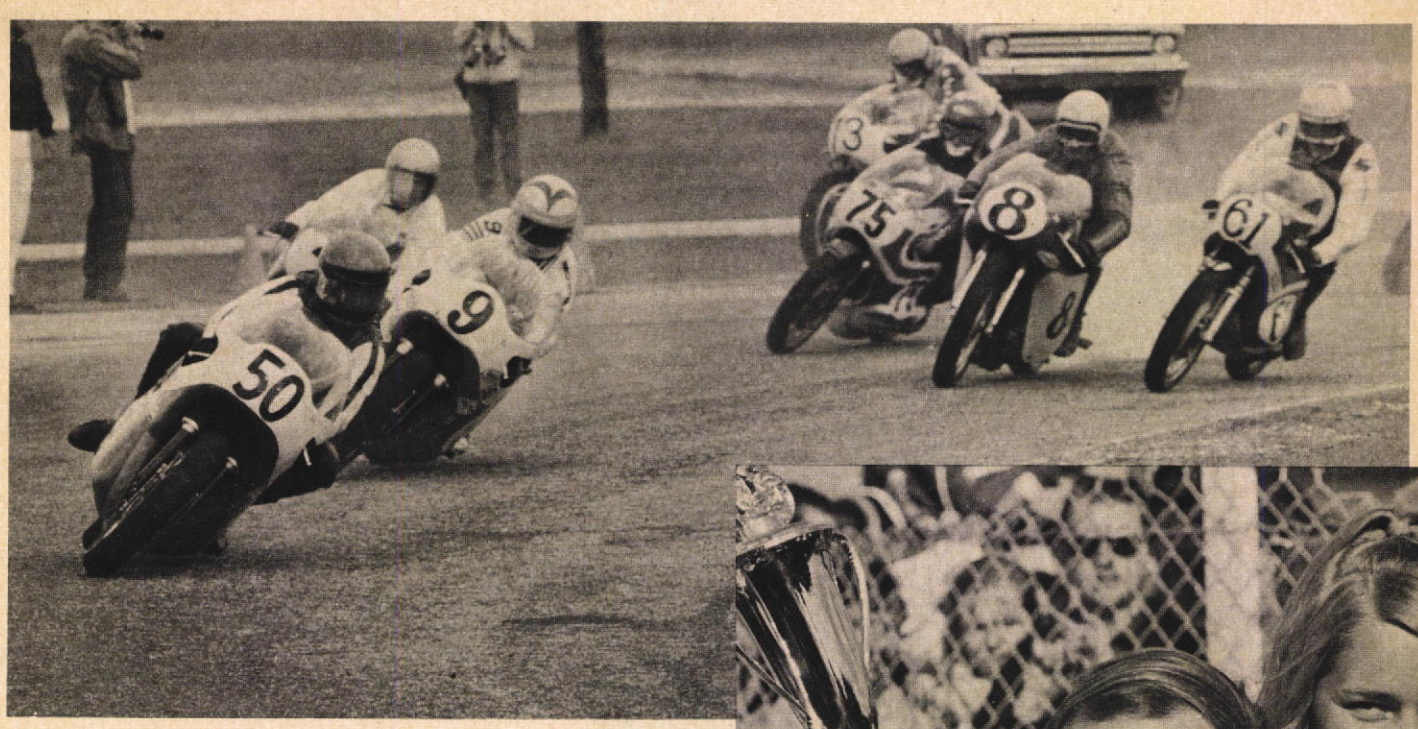
SPECIFICATIONS: SACHS 125 ENDURO

Make	Sachs
Model	125 Enduro
Engine	Two stroke
	Piston port inducted
Compression Ratio	9 to 1
Horsepower	15 @ 7,500 rpm
Carburetor	Bing Center Float
	24mm
Starting System	Kick
Transmission	5 Speed Constant Mesh
Gear Ratios	First: 39.99 to 1
	Second: 22.93
	Third: 16.95
	Fourth: 13.04
	Fifth: 10.78
Tires	Front: 300 x 21
	Rear: 350 x 18
Ground Clearance	10.5 inches
Frame	Single Backbone
	With Double Downtubes
Gas Tank Capacity	2.6 gallons
Wheelbase	51 inches
Suspension	Front: Leading Link
	6.3 inches travel
	Rear: Swing Arm
	4.6 inches travel
Weight	222 pounds
Price	$684.30

ENGINE	Excellent	Good	Fair	Poor	Unsatisfactory
Starting	•				
Throttle Response	•				
Vibration	•				
Noise	•				
TRANSMISSION					
Gear Spacing		•			
Clutch Smoothness	•				
Shifting speed		•			
CONTROLS					
Handlebar position		•			
Ease of operation	•				
Location	•				
BRAKES					
Lever pressure	•				
Pedal pressure	•				
Fade resistance		•			
Directional stability	•				
Stopping distance		•			
SUSPENSION					
Front	•				
Rear	•				
Ride control	•				
Dampening	•				
APPEARANCE					
Paint	•				
Construction and welds	•				
Chrome and trim	•				
ELECTRICAL					
Wiring	•				
Headlight		•			
Taillight	•				
Horn				•	
GENERAL					
Spark plug accessibility	•				
Instrumentation					
Side stand	•				
Center stand					
Seat comfort		•			
Muffling	•				
Tool storage space					

COMMENTS: Great suspension. One of the best trail bikes made. Ultra-low first gear for going thru the rough stuff. The price is right.

A LIMEY LOOKS AT DAYTONA



IN HIS FIRST U.S. VISIT, MICK WOOLLETT ATTENDS THE A.M.A. DAYTONA CLASSICS WITH CAMERAS AND PEN IN HAND. HE SAYS:

TWENTY YEARS of racing and reporting events all over Europe have taught me a number of lessons. One is never to underestimate competitors riding on their home ground; they are always hard to beat.

So when I visited Daytona this year for the first time, I expected your American road racers to be good. I was not disappointed! Mind you, after Saturday's 250cc race (won by Australian Kel Carruthers from England's Rod Gould with Canadian Yvon du Hamel third) I began to have my doubts. But, as you will remember Sunday's big 200-miler was a very different story.

Then Dick Mann, Cal Rayborn, Gary Nixon and Ron Grant proved that they are among the world's finest. I and thousands of other British race-fans are hoping that we will see them in action over on our side of the Atlantic before long.

I am certain that they would give a terrific account of themselves and would quickly master our British short circuits. Mind you, I am not saying that they would win. We have our local aces over here who take a bit of beating, but after Daytona, I am certain that any Anglo-American match race would be hard-fought.

But let's get back to Daytona. I was tremendously impressed by the speed bowl – Daytona International Speedway. We simply have nothing like that in Europe. However, the shortcomings of the infield section are almost too obvious to need listing: the corners are too few, too slow and it's too flat.

Of course, it is very difficult to lay out a good road racing section within the confines of a speed bowl, but I just wish that there had been some fast swervery; a section where a series of corners had to be ridden as one with the exit from a corner controlling the approach to the next and so on.

TOP: DICE for the lead in early laps of 200-miler. Hailwood leads the pack on his BSA. He's being chased by Nixon and winner Mann.

ABOVE: Long overdue in the Daytona 200 winner's circle, Dick Mann poses with trophy girl. Not shown in photo, Mann is astride his winning 4-cylinder 750cc Honda. He's been a consistent Daytona competitor for 16 years.

The bikes at Daytona were fabulous. It was probably the most impressive collection of racing motorcycles seen at a circuit since the great days of the early fifties in Europe, when the factory teams fielded by Norton, AJS, Gilera, MV, Moto Guzzi, BMW and NSU were fighting for supremacy.

The speeds were shattering. Who before Daytona would have guessed that a Triumph would lap the bowl at 157 mph? I must admit, that after years of praising foreign racing motorcycles, it gave me a great thrill to find British-built bikes in with a real chance of success.

It is now history that they did not win, but I am a firm believer that all sports fans admire a gallant loser far more than someone who does not compete at all. I am certain that the Triumph-BSA effort at Daytona did the British group a lot of good, publicity-wise.

Frankly, I was amazed how well the bikes went, because I know that up until eight weeks before Daytona no firm decision had been taken by the management as to whether they should race or not. So the way the bikes went and handled reflects great credit on development engineer Doug Hele, who did the engines, and factory tester Percy Tait, who sorted out the handling before the bikes arrived in America.

Because of snow, ice and lack of a suitable high-speed circuit, it was impossible to test the bikes on full throttle for more than a minute or two before they left England. This probably cost Triumph-BSA the race, for at Daytona they ran into slight overheating problems, and these were enough to put both Mike Hailwood and Gary Nixon out.

Hailwood's trouble was in fact a "cooked" plug and not a burnt piston. This was not realized immediately, but later the plug was replaced, a bigger jet fitted, and Nixon did 130 miles at Talladega on that same bike just three days after Daytona with no further trouble at all.

I think just about everyone was delighted that Dick Mann won Daytona at last. I met Dick when he came to England six or seven years ago and in a sport that is full of nice guys he comes pretty close to the top of a lot of people's popularity.

Honda will hate me for this, but after watching the race and thinking about it, I have the feeling that Dick would have won almost regardless of which bike he was riding.

His tactics thru the race were perfect. He was always in touch with the leaders, but was careful not to set the pace. And when you realize that both the other Hondas packed up with broken camshaft driving chains within the first few laps, you can begin to understand how carefully Dick must have been nursing that CB750!

Of course, the bike was a beauty. When it comes to racing, the old saying, "If it looks right, it is right," goes a long way, and stripped of their streamlining, those well-prepared four-cylinder 750cc flyers were an enthusiast's dream come true. 90bhp and up to 9,700 rpm . . . whoow!

I felt particularly sorry for Ron Grant, the British-born rider who has made it big in the States. He rode so well until his Suzuki ran dry. He and his Suzuki team-mates are keen to race in Europe and I hope they make it, for of all the Daytona equipment, the 500cc Suzukis are the most suitable for our type of circuits; very fast yet light and easy to handle.

The failure of the new Harley-Davidsons was another tragedy. But having met John Harley and three Davidsons at Daytona, I know that they can take it and come back again and hand it out next year. I never did meet a more enthusiastic board of directors in my life, and it was genuine enthusiasm for motorcycling and racing too, not just for "our" make.

Switching to the subject of race organization, I had better be careful because I would rather like to return to Daytona in 1971! However, I was not impressed by riders having to hang about on both Friday and Saturday mornings, not knowing if or when they could practice.

The instruction sheet simply said that the experts would be allowed out: "time permitting." Everyone knew that time would permit, but no one would say "when" until mid-way thru the morning.

This meant that competitors and mechanics had to rush their preparation and then stand around waiting. Surely the organizers could allot precise practice times for the various classes well in advance and stick to them. Then everyone knows where they stand. It works in Europe, so why not give it a try?

I was also a little disturbed by the time that it took the fire-truck to get to Ralph Bryans' blazing Honda when he crashed during practice and by what happened when it did arrive. Fortunately, Ralph was unhurt and able to walk away from the wreck so no real harm, apart to the Honda, was done, but it could have been a different story.

There did not seem to be enough officials out on the circuit to take care of any incidents that occurred. Inevitably riders do crash and when this happens you need more than just one marshal waving a flag. You need men on the spot to get bikes and riders clear of the circuit. Sounds elementary, but at Daytona officials were thick in the pit area, but thin on the ground around the circuit.

On the credit side, I was impressed by the smartness of the race officials in their uniforms and by the friendly attitude of most. It was also pleasant to cover a race without bumping into a policeman every time I went to take an action shot, something that happens all too often in Europe, particularly in Italy where it is a common sight to see the police arriving literally by the truck load.

America certainly leads the world when it comes to helmets but the rest of the riders' equipment hardly matched up to the standard of the hats. There seemed to be an almost frantic effort to have the most colorful leathers without worrying too much about whether the darn things fitted or not.

The boots worn by many looked as though they would be more at home on a construction worker and I was horrified at the number of competitors, mainly in the sportsman and amateur events, riding without gloves.

This is strictly forbidden in Europe, even in England where hospital treatment is free for all! After all, the hand is a relatively delicate thing and in a crash you instinctively protect yourself with your hands.

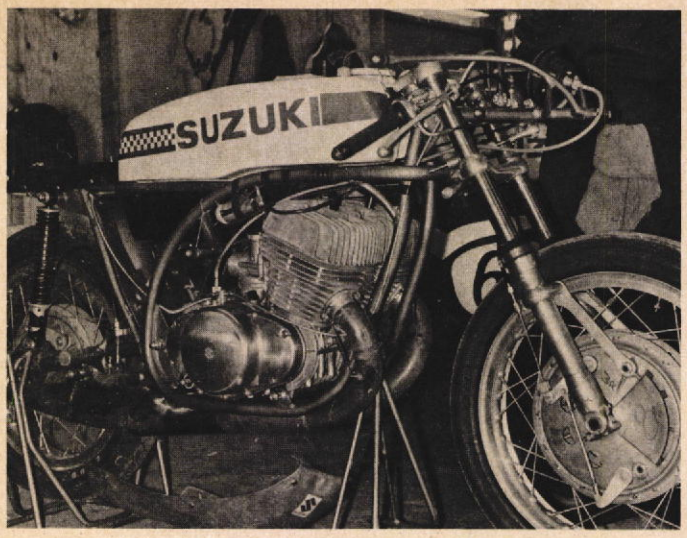
Another point that had me worried was that men who had never previously competed in a road race were allowed to start on factory machines capable of 160 mph in the 200-miler. I'm referring of course to Dave Aldana and Jim Rice, both on works BSAs.

I realize that both are very talented riders with a lot of success in other branches of the sport and fortunately both rode sensibly and kept out of trouble. But it would seem to be in the interests of all to bring in some sort of rule that competitors must have completed a certain number of road races before they compete in the big one at Daytona.

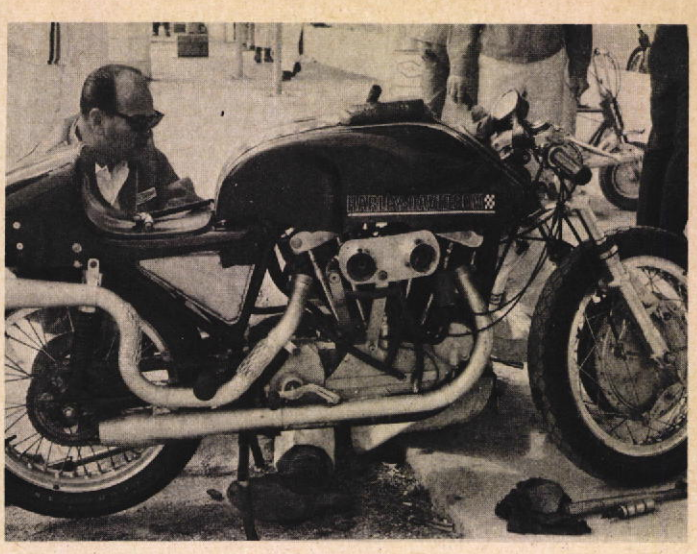
So there we are. A lot of praise, a few minor criticisms, many pleasant memories and a determination to return to Daytona next year. At long last the barriers created by different organizations and rules are being broken down.

Daytona 1970 was a truly international event and it proved to all the world that the best American and top European riders are in the same bracket of skill.

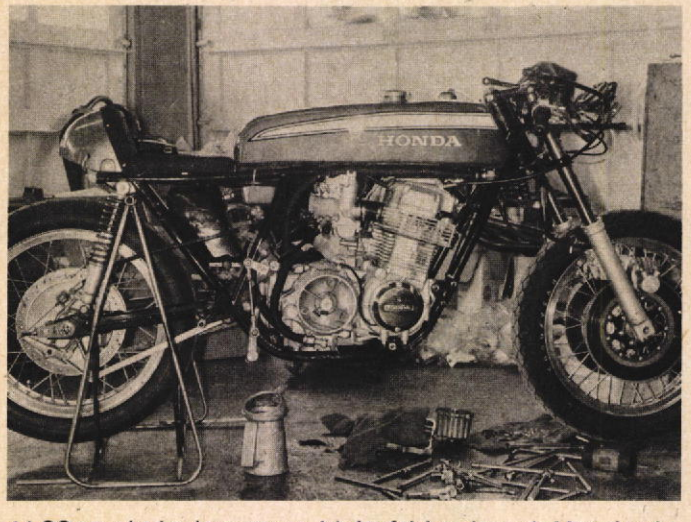
Now we can look forward to more big road races with competitors from both sides of the Atlantic. With the sport booming in the States, I can see the day, not too far distant, when it will be the European riders who will be struggling to maintain a place among the top road racers.



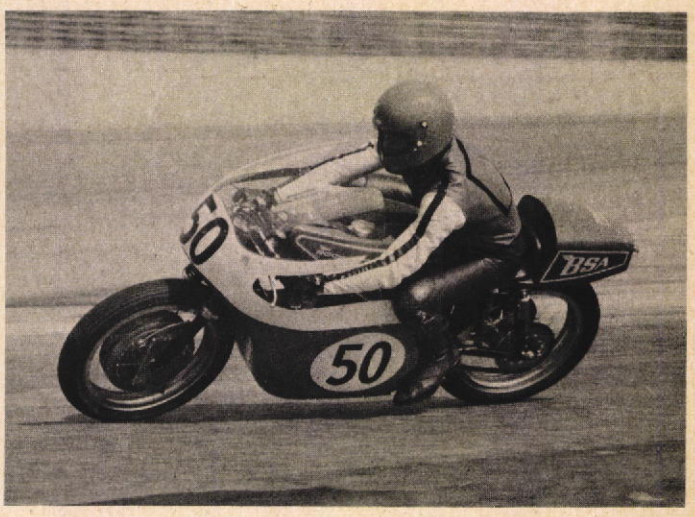
A PEEK at one of the Suzuki entries. This 500cc 2-stroke twin cranks up to 8-grand, with 68 horses on tap, weighs 285 lbs., hits 160 mph.



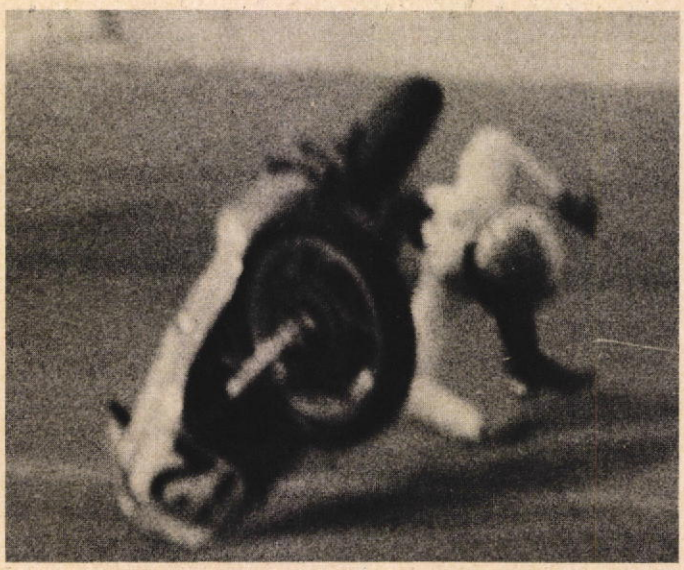
CLOSE look at Harley-Davidson 750 XR, overhead valve V-twin. Model pumps out 68-70 HP at 7800 rpm, weighs 335 lbs. 18-inch wheels are used.



ALSO caught in the garage with its fairing down is Mann's winning CB 750 Honda. Potent 4-banger delivers 90 HP at 9700 revs. A screamer!



MANY times world champ Mike Hailwood in action on the BSA 750cc Rocket 3. Daytona was his third motorcycle race in two years.



PAIR of pix, above and right, show Ralph Bryans unloading from his 750 Honda. Bryans crashed during practice when he lost control of bike while accelerating onto the high bank.

SPILL in left photo resulted in the Honda Four catching fire. Fortunately, Bryans escaped uninjured and casually removes his helmet while the bike burns.

THE CONTINUING STORY OF ENGLISHMAN PAUL PRATT AND HIS MOTORCYCLING JOURNEY THRU THE SOUTH AMERICAN CONTINENT

PRATT'S ODYSSEY

THE congress in Brazilia.

LEAVING LIMA, at sea level, on the road to Oroyo you climb up higher and higher into the clouds until the summit is reached at Ticli, 15,889 feet above sea level. This is a terrific climb to make in one day. When I reached the summit it was cold enough for snow. I had quite a headache and felt sick from the altitude. It was little comfort to know that the tourists who usually make this ascent in the train from Lima have a doctor with oxygen to accompany them! However, my luck was in a family from Lancashire, England, who had followed me up the ascent in their Volkswagen. At the top they introduced themselves. They had lived in Peru several years and worked at the copper smelting plant in Oroya. This was on my way and not so far from Ticli, so I accepted their offer of a place to sleep for the night.

Feeling somewhat refreshed, yet not accustomed to the altitude, the next morning I set out on the dirt road for Huancayo. The ride thru the Peruvian Andes is a fantastic experience. Not only is the scenery out of this world, but there are so many interesting towns to visit. Nevertheless, it is a hard experience. The valleys below 5,000 feet are extremely warm and tropical and the mountain passes quite cold.

There was very little traffic on this route, which was just as well as the standard of driving left little to chance. It was not uncommon to come across wrecked vehicles by the side of the road and, occasionally, to see the wreck of a bus or car that had gone over the unguarded side of the road on a mountain stretch to be wrecked hundreds of feet below. When a bus came from the opposite direction I always gave it as much room as possible. The idea of these drivers seemed to be to leave me as little room as possible between the side of the road and the oncoming vehicle. Actually, my only narrow escape came when I was standing still. I had followed a truck on a long twisting climb, unable to overtake because of the dusty road and narrow bends. Then another truck approached from the opposite direction and they both stopped for a talk. I stopped behind the truck, and as he had stopped a little ahead of the oncoming vehicle, making conversation difficult, he went into reverse without seeing me behind. Luckily the driver of the other truck spotted me and shouted in time and the reversing truck came to a halt with the tailboard inches from my front wheel.

I arrived in Huancayo, tired and still affected by the high altitude, and visited the North American Bi-national Center. These institutions are primarily engaged in teaching English to the local people and often provided me with the opportunity to lecture in Latin America. (They are partly sponsored by the U. S. Government.) The Institution in Huancayo was no exception. At short notice they arranged a lecture, which all the students attended.

When I was ready to leave Huancayo it was apparent there was a gasoline shortage. All the stations were closed awaiting deliveries. Since I would not be able to reach another town without filling up, this presented a problem. I approached the owner of one station who agreed to fill the tank to enable me to continue the ride. When he was observed doing so there were some unpleasant arguments with local people.

This was about the only part of the trip where I felt that the people were hostile to travellers from Europe or the U.S.A. In some places they had forced the Peace Corps to leave, probably due to certain outside propaganda. There were also several police controls in this area and, unlike Columbia or Ecuador, where similar controls passed the Triumph with the minimum inconvenience, these Peruvian controls insisted in seeing all my papers. I always carry valuable documents, like my passport, packed away – so it cannot easily be stolen or damaged by weather – and only have them available when actually crossing a frontier. After unpacking everything the police invariably complained that they were unable to understand anything as they were all in English! I lost a lot of time and patience at such controls and if tourism is to be encouraged in these countries then it will be necessary to alter some of these practices!

As a climax I came to Abancay and the approach is quite unforgettable. The first view one gets of the town is from across the valley, looking like a small speck in the distance. I got my first glimpse of the town early in the afternoon and thought it would be possible to arrive by early evening. But the road twisted around various hillsides, up one valley and down the next, before this exhausted rider finally reached the valley approaching the town, long after darkness had fallen. Finally I found a hotel to sleep but nowhere to leave the motorcycle. I finally left it in the police station. When I came to pick it up I found the police sitting on it, someone had removed my decals and the back tire was flat.

This was the first of any tire trouble. All during the ride I used Dunlop K 70 tires and found them an excellent compromise, both for paved roads and off-highway use, and they gave very good results. However, these days spent riding thru the Andes in Peru were very hard on the tires due to the heavy

load I carried (150 lbs.), and the large number of sharp stones that I was running on all the time. As the cover on the tire looked okay, I feared the worst – that there was a concussion burst on the inside wall of the tire.

The road out to Abancay was just as spectacular as the entrance. It seemed to wind from one mountainside to the next as it soared up into the clouds. But the trip to Cuzco was marred as the tire kept losing air and had to be pumped up every half hour. Later I ordered a tire to be picked up at a future location.

As if tire problems were not enough, at dusk I came to another place where there had been a landslide. Two bulldozers were clearing a way and I helped clear rocks from the road for an hour or so until it was possible to get thru. This was not so easy as the bulldozers had left a surface of soft mud and the heavily loaded back wheel kept digging a grave. With all these delays it was impossible to reach Cuzco that evening, so I spent the night at the small village of Anta where I slept in a farmhouse.

The remainder of the ride to Cuzco was relatively easy, and once established in that town I visited and photographed many of the wonderful Inca ruins in the vicinity. The fine stonework of these ruins compares favorably to anything else I have seen.

While in Cuzco there was a rather amusing accident. I used the motorcycle to get out into the surrounding countryside and visit various ruins. After coming back to the hotel after one such trip out to an Inca fortress, the motorcycle fell down against a small wall in the courtyard of the hotel, with a resounding smack against the fairing. This did not harm the fairing, but the wall just crumbled. I did the best I could to rebuild the wall before the manager returned! Before leaving Cuzco I took the back tire off and had a patch vulcanized to the inside of the cover and in this form it took me to La Paz, Bolivia where I changed for a new K 70.

It was a long cold ride to Juliaca and Puno, where distances and snow storms proved too much. I finally had to ask for a bed at a remote experimental station of the Puno University rather than be stranded in the mountains! Near Juliaca I was shown a very interesting place where, with a vista of the Andes in the background, one can see three roads from three different civilizations – Inca, Spanish and modern Peruvian – all going to the same place by different routes!

Near the Bolivian border I came to the town of Juli where I had an introduction to the mission of the Maryknoll fathers from the U. S. A. The fathers use motorcycles and one Land Rover to reach the surrounding villages and minister to the people. They use an old Norton and Triumph and a more modern Suzuki, finding them ideal for reaching the more remote villages. They were obviously very much admired by the young boys in the village who followed them everywhere they went.

After visiting them for a couple of days the journey continued in the direction of the Bolivian border, along the shore of Lake Titicaca. After passing a couple of police controls I finally arrived at the border town of Desaguadero. The guards at the border offered to look after my bike while I went on foot to the offices to clear the papers and try to change some money. This proved to be a mistake, for as soon as my back was turned they tried to sit on the Triumph. Being unaccustomed to so much weight, it fell over – fortunately without any more damage than bent panniers and controls.

Once in Bolivia it was a case of riding along a road, with a rough surface of large stones, to the capital, La Paz. This is the highest capital city in the world, standing at 12,400 feet. It became obvious that a civil war was on and foreigners were under suspicion. In the 70 miles from the border to La Paz I was stopped by guards, papers were examined and some of my luggage searched.

Most of the population in Bolivia live at around 12,000 feet. When I wanted to travel it seemed to either be raining, hailing or snowing. When I arrived at La Paz I was windswept and cold. However, I enjoyed my stay in spite of the weather. The people were friendly and cooperative, though due to the schools closing at the beginning of December for Christmas it was difficult to get lectures.

Bolivia is the only country that I have visited where one must have a form of permit called "Hoja de Ruta" to make a journey. This is a form with details of the journey and a small

WATER crossings always brought a crowd. Possibly they hoped the traveller would end up in the river. This crossing is located at Peru, near Puno.

PRATT'S ODYSSEY / Continued

tax is made when issued. When I left La Paz to ride to Oruro I was told in no uncertain manner to get this form from an office on the road out of the town. However, I never found the office as I climbed out of the city onto the "Altiplano" at 13,400 feet. After being in La Paz for several days I was beginning to feel the effect of the altitude and understood why the city of La Paz had been able to manage without any fire brigade until very recently.

I made good time thru occasional rain, hail or snow storms in the direction or Oruro, but there was a police check half-way and he asked to see the "Hoja de Ruta" which I had never obtained. Instead I showed him my International driving permit, which he had obviously never seen before, and said "diplomatico". The guard saluted smartly and opened the barrier for me to pass!

While in the town of Oruro I visited the railway depots and travelled many miles on steam locomotives. The Bolivian railways are still steam operated except for the occasional railcar. While making trips to the surrounding countryside by train, I kept hearing announcements on loudspeakers advising people to use the trains, due to impassable roads in the wet season. As I came farther south the reason for these warnings became obvious. After reaching the windswept town of Uyuni it became difficult to find any roads to reach Chile, the next country I planned to visit.

My first attempt to reach Chile was by riding across the salt lake, but this failed, largely because it proved impossible to sense directions and also the lake was waterlogged. Then I tried to ride along the railroad tracks to the Chilean border, a distance of about 220 miles, but it proved impossible to manhandle the heavy Triumph and 150 lbs. of load across the numerous bridges due to the distance between the railroad ties. Fortunately, the Bolivian Railways helped me out and plans were made for the Triumph to be loaded on the freight train from Uyuni to Ollague, and the Chilean border. In the meantime I was allowed to put my camp bed in the railway club in Uyuni.

The night before leaving there was a "fiesta" in the club which lasted well into the next day. I had quite a lot to drink and finally managed to sleep for an hour on the billiard table! At 3 o'clock the train was due to leave. It was quite an effort in the intense cold to manhandle the heavy motorcycle and luggage, after having little or no sleep, across four sets of railway tracks to the train. There was no ramp, so the Triumph and luggage had to be lifted from ground level into the train by five people in darkness, with the only illumination coming from kerosene lamps. I had planned to travel in the cab of the locomotive, but for the first time in Bolivia I was refused permission. This proved a blessing in disguise as I travelled in the last car with the motorcycle.

The first time the brakes were applied there was a chain reaction back along the freight train, which threw me on the floor. The Triumph slid from one end of the car to the other. Luckily I was able to hold the bike against further falls. That freightcar ride was one of the coldest rides I have ever made. Even though I wore my Belstaff motorcycle suit all the time, I was frozen stiff until the sun came up. Finally we arrived at the Chilean border, the motorcycle was unloaded by willing hands, and it was possible to ride again to the coast of Chile.

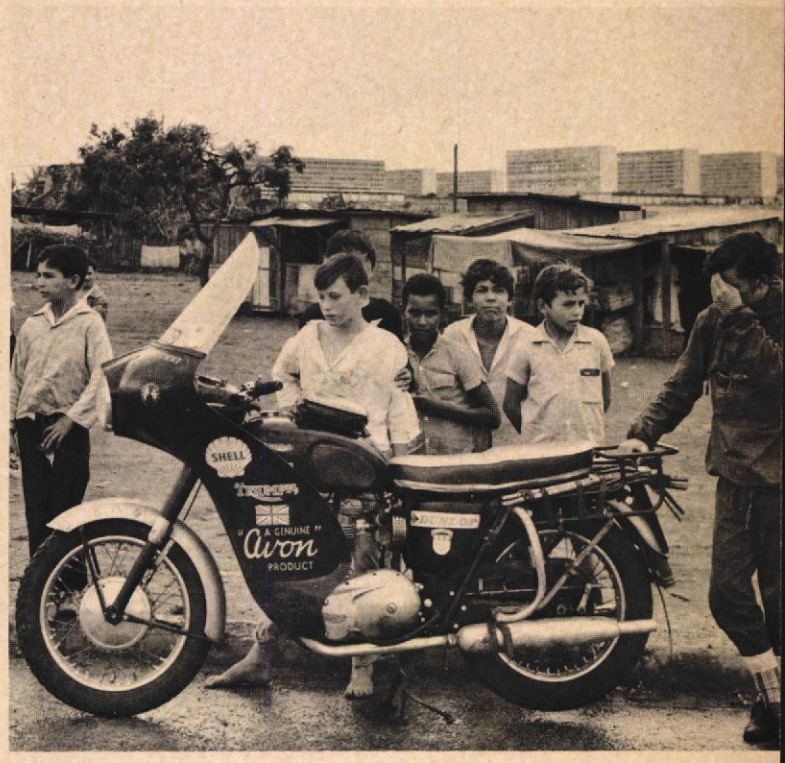
People have often asked me how I manage to get gasoline while travelling in Latin American countries. Generally, gasoline is available from some of the companies we are familiar with, but is usually of a lower quality. For example, Shell super in Brazil is only 84 octane and Shell regular 78 octane. Bolivia was a country with only the state petroleum company and, like Ecuador or other countries with a monopoly, the quality was extremely bad. Generally I managed to get Castrol lubricating oil in most countries, however Bolivia was one of the few nations where there was no importation of Castrol oil, so I had to manage with the local oil. Often when travelling in the more remote places there are no gasoline pumps and one has to purchase gasoline at shops from glass jars or metal drums. You never really know what you're getting. You just hope it will be possible to make the nearest town.

While travelling thru Latin America it was generally possible to earn expenses by giving lectures and selling articles and photographs. However, since I was always paid in local currency, the change that was received at the border was very important.

I started travelling at 3 a.m. and had not had much sleep the night before, so I thought twice about setting out for the next town of Calama. But the assurance that it would take no more than two hours caused me to make the effort. As usual, this proved an optimistic statement and it took the better part of five hours. I arrived in Calama, the first Chilean town, completely worn out. The road from Ollague at the frontier was difficult, including crossing several salt lakes, and at one point having to climb up a steep road where the sand was so deep that it was necessary to carry the luggage up the hill and then help push the motorcycle. Otherwise the back wheel just dug a hole in the soft sand. Also I lost my keys the same day. One result of this was that I could not open the Craven pannier bags and had to force them open and telegram Ken Craven, in London, for some new keys!

The ride down to Antofagasta, on the Chilean coast in the Atacama desert, was completed over good roads from Calama. It included a descent from 12,100 at Ollague, which is surrounded by volcanic peaks of over 17,000 feet, to sea level.

I was back at sea level again and passing along good roads thru the Atacama desert, in the direction of Santiago. Occasionally I could see the Pacific ocean, but most of the time it was just desert for miles. The next stop was the small town of Taltal, where there was an interesting railway to photograph. It amazed me how the climate had changed after leaving Bolivia. Almost immediately after crossing the border the



FAR LEFT: Seven horses meet thirty-seven horses near Resistencia, Argentina.

LEFT: World travellers meet and exchange important information regarding the Pan American Highway.

ABOVE: Llama meets Triumph on the desolate, windswept Bolivian tableland.

RIGHT: A contrast in Brazilia.

weather had cleared up. It was now dry, sunny and warm. In this small town I was introduced to the only Englishman, who advised me to eat the seafood at a certain restaurant. This proved to be a bad move and I spent the whole night violently ill. The following day, still feeling bad, I remained in bed until noon when I overheard the hotel owner saying that "if the Gringo did not leave soon he would come in and ask for more money. I then remembered with a start that it was Christmas Eve, and I had no desire to spend it in such an unfriendly dump. So I made the effort, packed and loaded the Triumph and set out south again.

Somehow the riding revived me a little and I just made the next oasis, Chanaral. As a Christmas Eve gift to myself, I went to the most expensive hotel that I could afford ($2), took a bath and went to bed. On Christmas day scooter riders, who had heard of my arrival in town, came to the hotel and invited me to attend a scooter race taking place that morning. The police had closed the main street and arranged a course. This meant traversing part of the Pan American Highway, as it completed a circle before returning to the start. The scooters all looked standard, though some had outlandish exhausts and provided exciting racing. The course was quite sandy at one corner and when two riders dropped their machines the police took action and stopped the races, much to the disgust of the crowd.

About this time I experienced my first earthquake – a most frightening experience. I was recuperating from my illness and was alone when all the windows in the house started to rattle. It sounded as though an express train was passing just in front of the house. The shaking lasted for five minutes or so and all was over, but I never slept again that night fearing it would start up again. Later I learned this tremor was the largest they had had for some time. I was to experience other tremors in Chile, but none frightened me as much as that first one!

Feeling better a few days later, I headed south again. By a lucky coincidence, near La Serana, I met two Englishmen, Richard Horsbury and Alan Card, who were planning to drive an old Austin 7, 1933 model to the United States. Even they did not plan going thru the mountains and, in fact, had a much easier route than the one I had taken. It was, nevertheless, quite an undertaking for them in such an old car. During my whole trip, which at this time had lasted almost a full year, I hadn't met anyone making the complete journey from North to South America. This meeting was a pleasant occasion, as we brewed tea by the side of the road on our portable stoves and exchanged valuable experiences.

On New Year's Eve I arrived in Vina del Mar, the seaside resort near the great port of Valparaiso. I spent the evening with a British family, who had lived in Argentina most of their lives, and watched the beautiful fireworks display over the harbor at midnight. On New Year's Day I went to Santiago, the capital of the Republic, and on the way realized that I had been on the road for almost one year. The Triumph 6T had performed magnificently and given the absolute minimum of trouble, often working at high temperatures and other times at high altitudes with bad gasoline and invariably on bad roads. At this state some 15,000 miles had been covered, but when one considers the great distances in the Andes when it was impossible to leave second gear for day after day and the bad roads, it was equivalent to much more. I wondered when I would have to look inside the engine?

On arrival in Santiago another shock awaited me. There was no Dunlop K 70 tire for me, as I had ordered previously. Fortunately the factory came to the rescue and a tire was flown down from the Dunlop depot in Lima for my immediate use. Of course, in true Latin American fashion, it took longer to locate the tire on arrival and get it out of customs than it did for the factory in England to arrange for the tire to be sent to Chile!

It was the Christmas season and due to the change of seasons the summer holidays had started at the schools. This meant no lectures to cover expenses, so other alternatives had to be arranged in the form of advertising and writing articles in order to build up the financial reserve necessary to start the last stage of the ride. This included travelling south thru Chile and then crossing the Andes for the last time in a snow storm and coming to know the great countries of Argentina and Brazil.

MINI-BIKE CORNER

HODAKA POWERED MINI MAKES MAXIMUM EFFORT

By Al Jacobs

CALL IT logical evolution, improving the breed, or whatever you want, but mini's are beginning to pack a real kick. One of the new generation mini's is the Nova "Rough Rider."

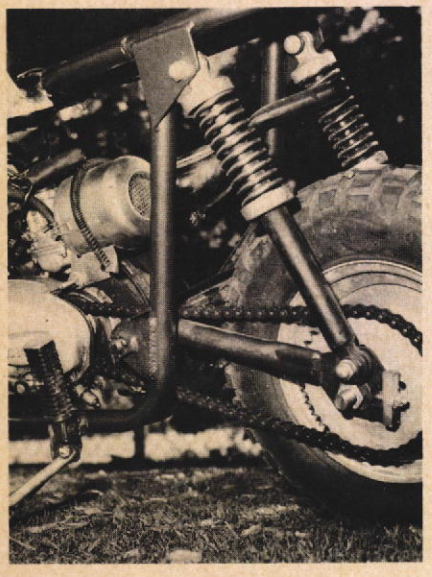
There has been a gradual increase over the years which has brought about the mini with maxi-power. Now we could go on all day about the mini-maxi thing, but let's not. The heart of the "Rough Rider" is its 100cc Hodaka engine, and a very tough heart it is. The Hodaka engine is a wild winding two stroke, which is more than enough for the job it is asked to perform. Along with this you get Hodaka's five speed gearbox which lets you keep high on the power curve to make the most of the engine's performance. Besides, it's fun going through those five cogs. When winding through the gears we found that without any difficulty we could easily bring the front wheel off the ground in the first three.

With so much willing performance it is well to know that Nova also took the time to surround it with a sturdy and quite ridable frame. While not being overly heavy it is strong enough to withstand the terrain it will most certainly see. Eight-inch wheels are standard, however ten-inch wire ones are optional. Braking is both front and rear, and very good; they are the internal expanding variety. Clutch action is smooth and positive, with no hang-up through the gears. Suspension is front and rear also, dampening is good over rough obstacles and to say the least is appreciated. Incidentally, the seat, which is behind the chrome gas tank is one of the more comfortable we have come across. That may not seem like much, but try some extended riding on a plain wood board and see how it feels. Being of moderate weight the "Rough Rider" can be easily loaded into almost any car or truck. To aid in this the bars are easily removable without the need of tools.

In our test of the Nova we chose a combination area which included both mountains and desert. We did this for two reasons, first it would give the bike a good workout and secondly it would give us a chance to clear ourselves of that good ol' Los Angeles smog. One of the first things we discovered is that you don't have to be afraid of any hill, mountain or what-have-you. Because this little bike will tackle anything and 98% of the time it will make it, so just hang on and go.

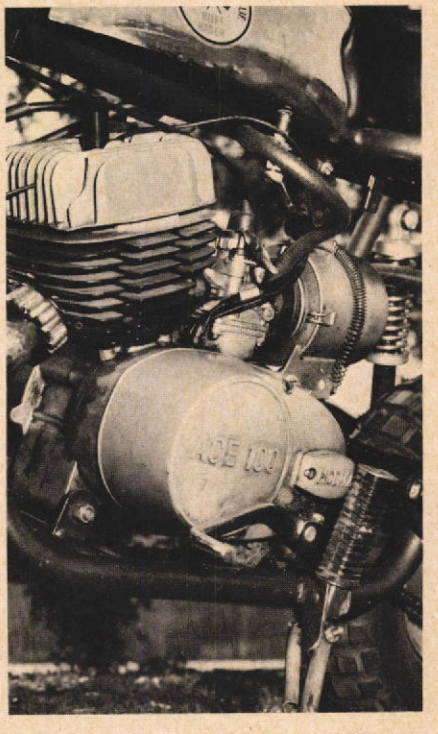
We could not find fault with the bike's handling, and we took it everywhere. On curvey trails and across open country it performed well and gave every indication that it was ready for more. Coming down one particularly steep grade it became prudent to test the brakes, immediately, much to our joy they were well up to the job. Control is even and predictable with the suspension and body English combination taking the Nova through in grand style.

What the Hodaka powered Nova "Rough Rider" is then is a high performance, well engineered good handling bike which can take you anywhere. At the same time it is easy and enjoyable to ride and can be easily transported. If by chance you should wish to make it street legal, there is an optional street kit consisting of fenders, lights etc. However for our money the "Rough Rider" is at its best when the going gets really rough, and you get going.



ROBUST swinging arm rear suspension, forks and frame add up to super-husky mini-bike.

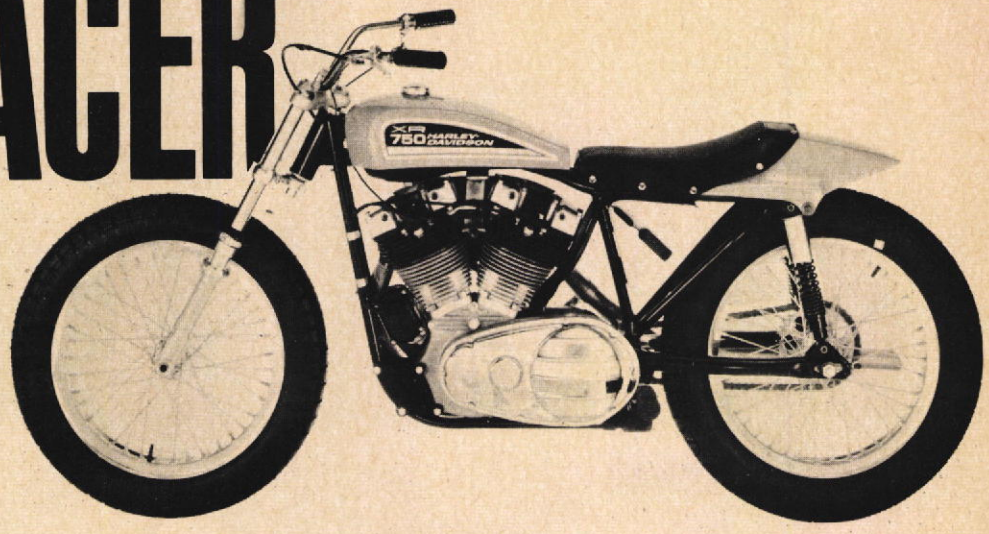
MAXI-powered mini delivers more than ample performance for its size.

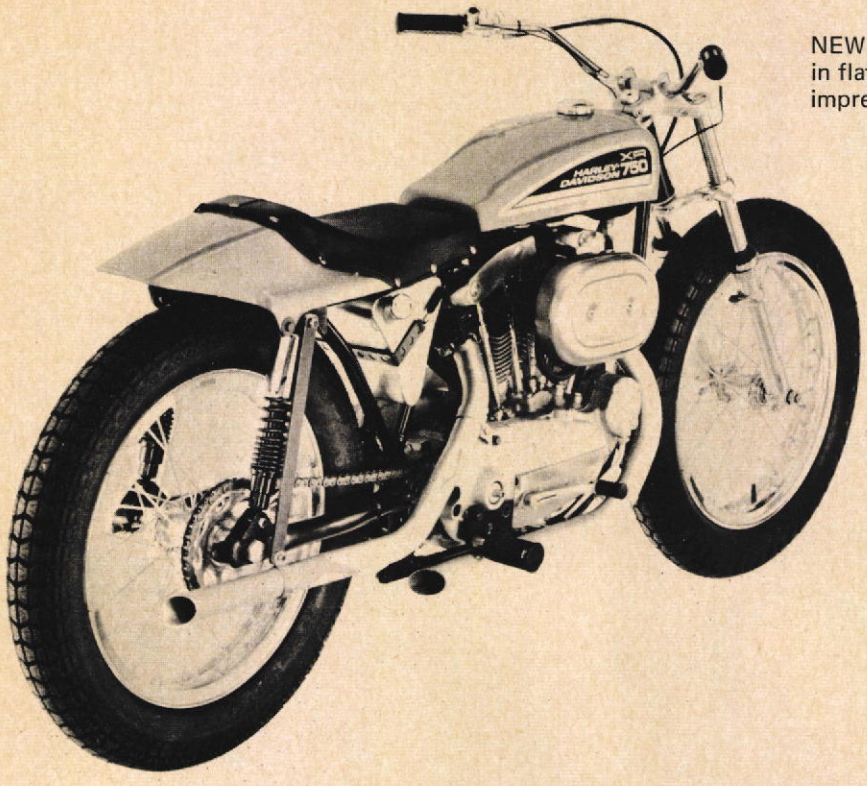


NOVA Mini-Bike features Hodaka Ace 100, 2-stroke engine with 5-speed gearbox.

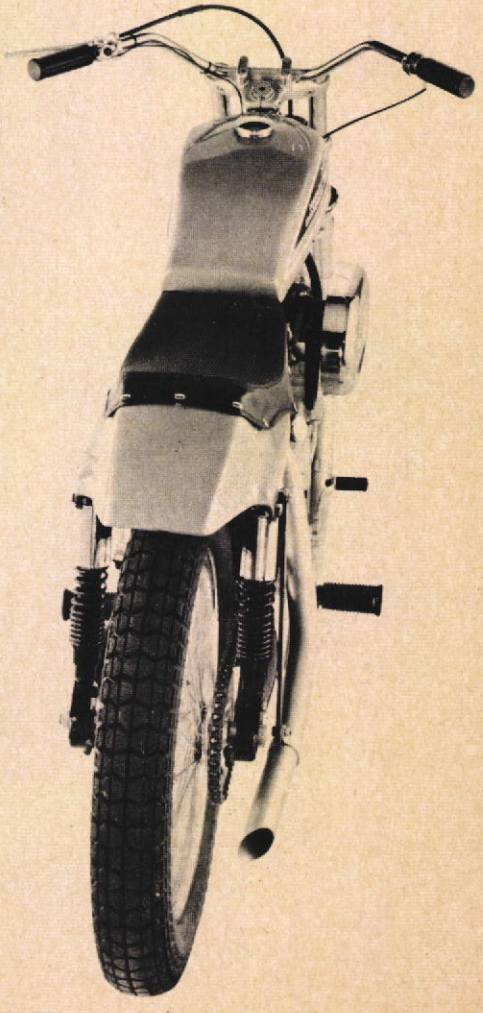
XR RACER

LATEST CONTENDER FROM MILWAUKEE IS THIS OVERHEAD VALVE 750cc V-TWIN





NEW Harley-Davidson XR, shown in flat-track racing trim, looks impressive from any angle.

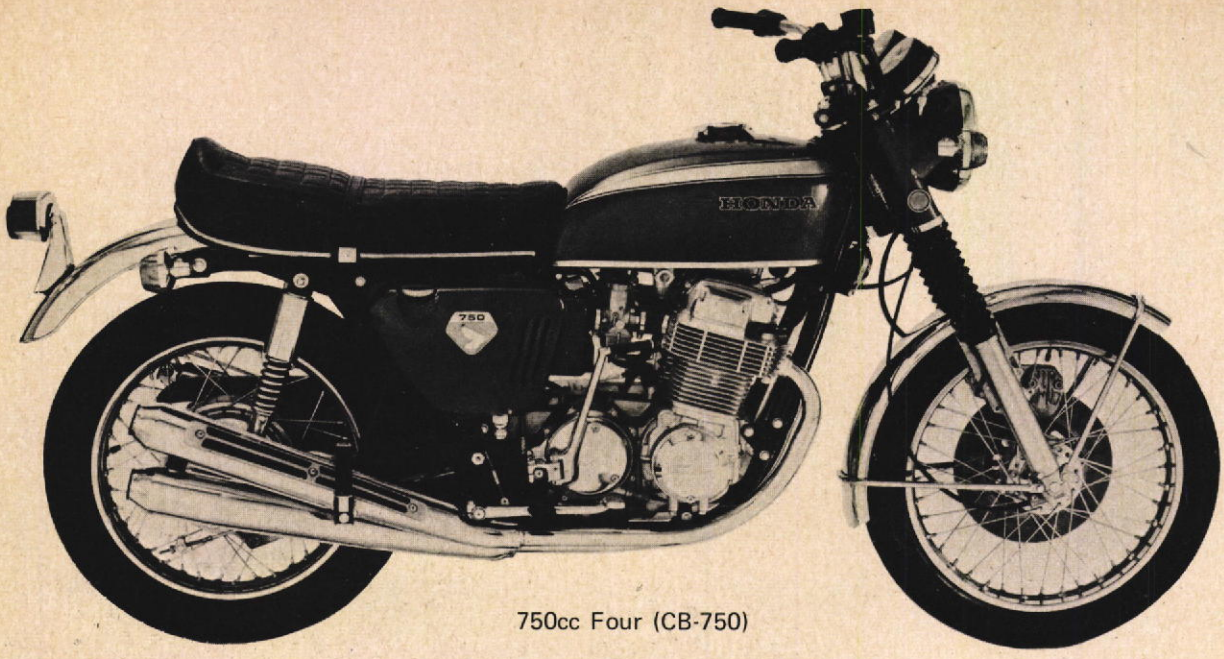


LOUISVILLE, Ascot, Indianapolis, these and many other dirt tracks will not soon forget the thundering sound of the Harley-Davidson KR flathead winners. Like all good things, they must pass. The design, engineering and racing talents that created the KR have passed on their best to produce a racer for the '70's, the XR.

The engine is a departure from the flathead configuration for the Milwaukee racing division. There's 750cc of OHV engine fitted to a welded 4130 Chrome Moly swing arm frame. In the go-goodies department there are all-new race-design valves, heads, aluminum pushrods, pistons and cams. The near-square bore-stroke pumps up a 9.5:1 compression ratio.

In the handling department, it's Ceriani up front and Girling adjustable racing shocks on the swing arm, which provide sensitive suspension feedback. Aluminum hubs and rims front and rear carry 4.00 x 19 Pirelli Universal and Goodyear All Traction tires, respectively.

From the treads to the featherweight fiberglass tank and fender-seat, Harley-Davidson's XR is obviously a machine to be dealt with on the dirt.



750cc Four (CB-750)

HONDA '70

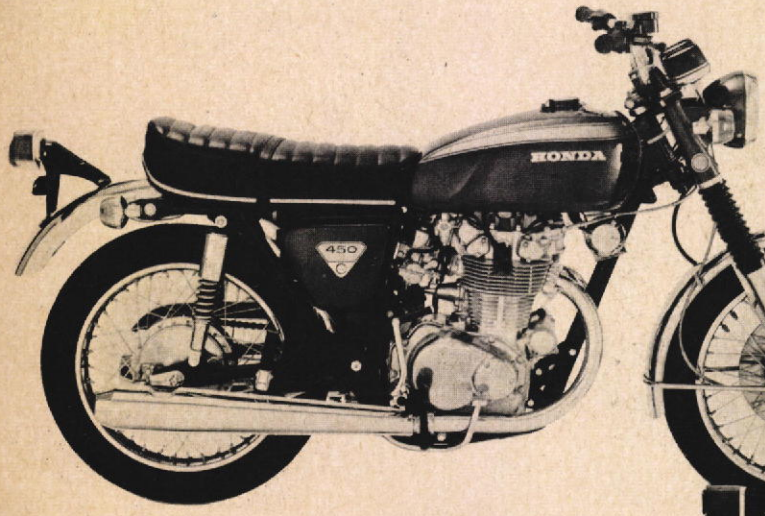
SOMETHING FOR EVERYBODY IN HONDA'S 1970 LINE-UP – FROM MINI TRAIL TO THE FOUR

AS THE Honda ad states, "From the Mighty to Mini . . . Honda has it all." Looking at their impressive 20-model line-up for 1970, it's quite obvious that they do, what with a trio of trail bikes, a like number of street/scramblers and a quartet of road models.

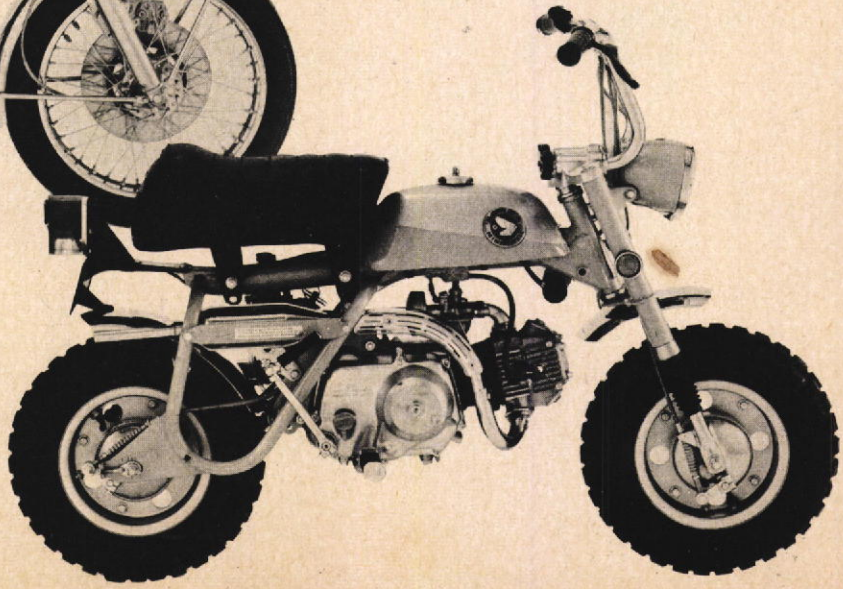
Hitting the highlights of the Honda 1970 program, Honda offers their very popular Mini Trail 50, as well as the Mini Trail 70, plus the well-proven Trail 90.

The street/scrambler range includes, among others, the CL-100, the CL-175 K4 and, at the top end of the scale, the CL-450 K2, a 43 HP double-overhead camshaft twin.

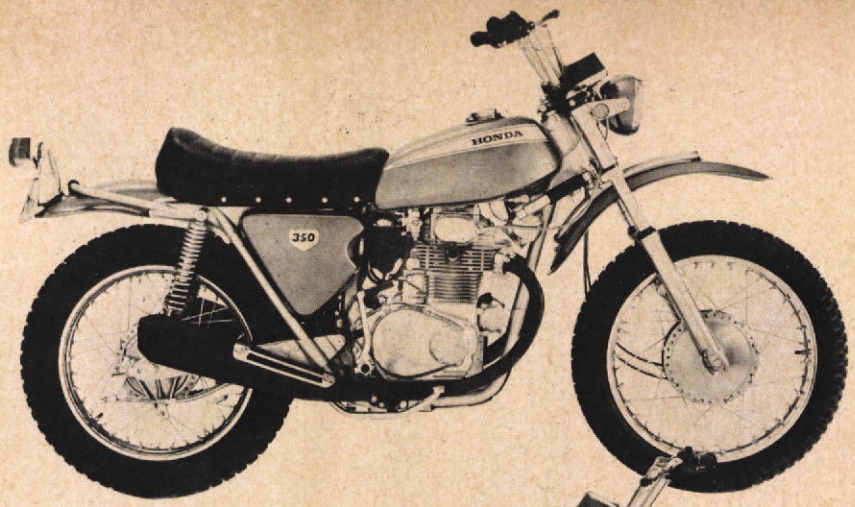
Highlighting the Super Sports road class, are the CB-100, the CB-175, the CB-350 and Honda's new contender for King of the Road honors, the CB-750, a four-cylinder smoothie punching out 67 HP at 8,000 rpm, with a five-speed gearbox and a hydraulically-operated disc brake up front.



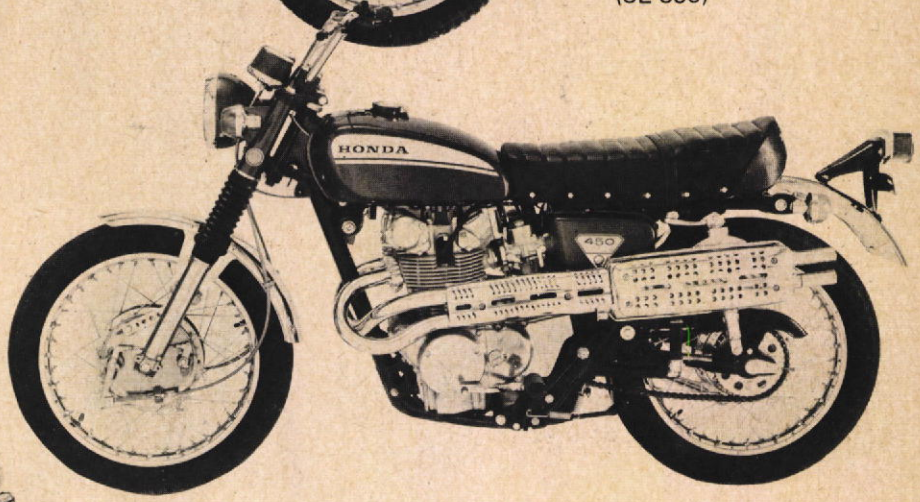
LEFT: Super Sport 450 (CB-450 K3)



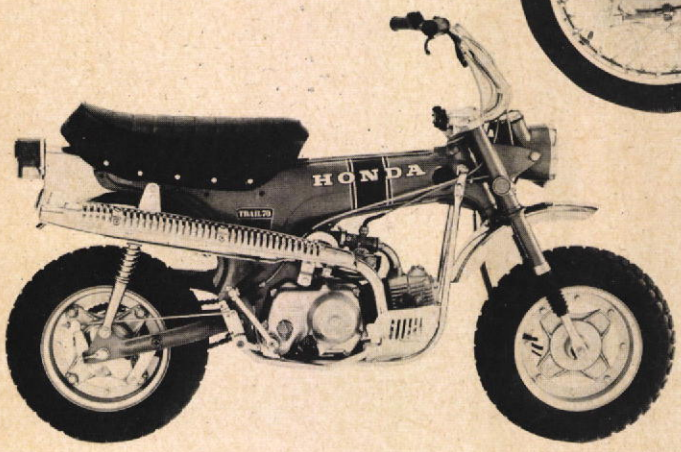
RIGHT: Mini Trail 50 (Z-50 K1)



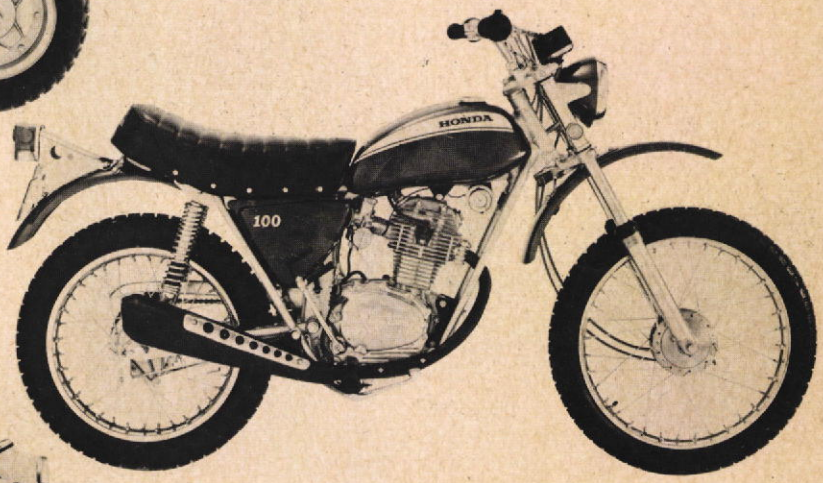
LEFT: Motosport 350
(SL-350)



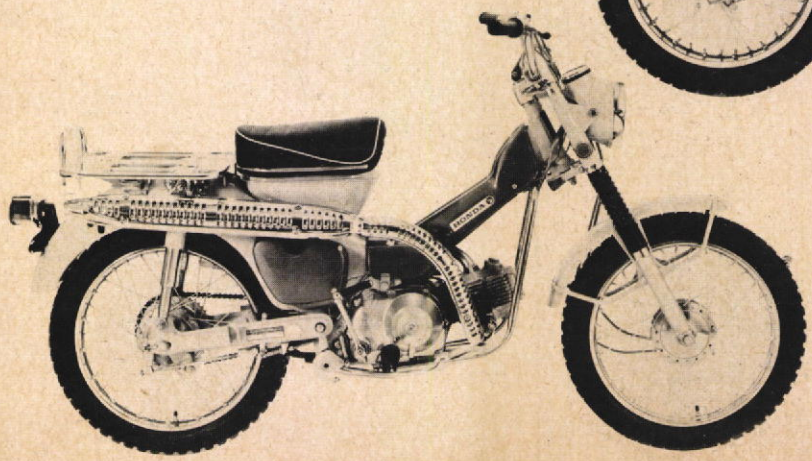
RIGHT: Scrambler 450
(CL-450 K3)



LEFT: Mini Trail 70
(CT-70)



RIGHT: Motosport 100
(SL-100)



LEFT: Trail 90
(CT-90 K2)

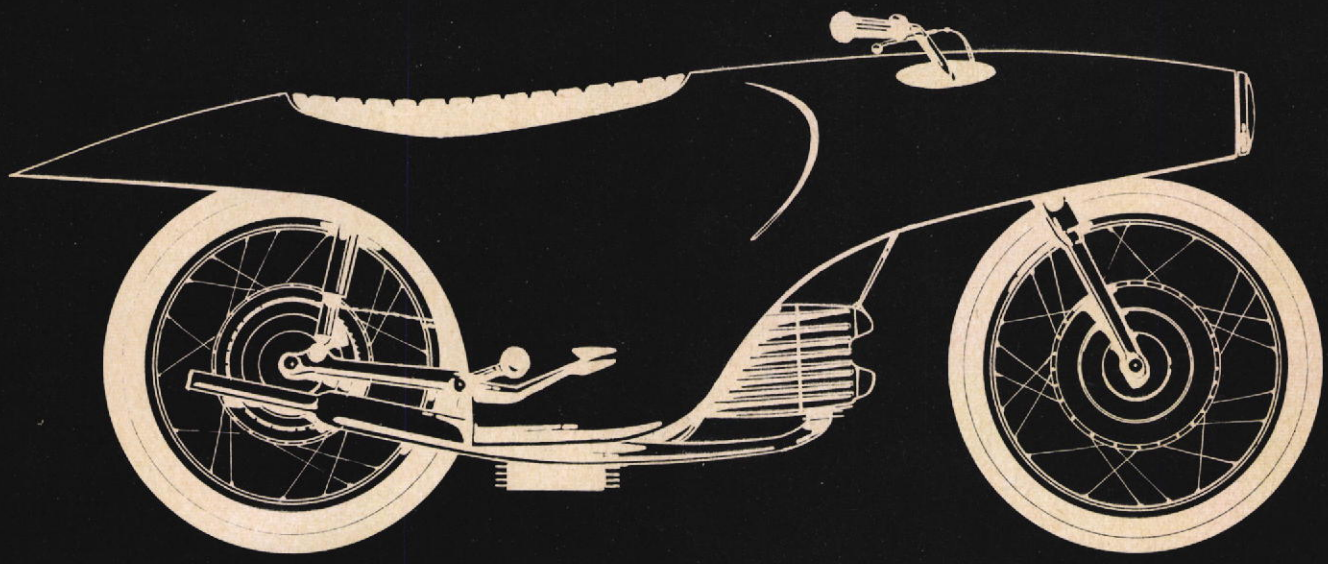
FOCUS

By LARRY ETHRIDGE

"ALL RIGHT GUYS, I'LL GET SKIP VAN LEEUWEN'S AUTOGRAPH ONE WAY OR ANOTHER . . . . !"

THE MODERN MOTORCYCLE

THE MODERN MOTORCYCLE IS THE SAFEST VEHICLE ON OUR HIGHWAYS WHEN PROPERLY HANDLED. WILLIAM HAMPTON TELLS WHY.



THE MODERN MOTORCYCLE is actually the safest vehicle on our highways, when it is properly handled. This may be difficult to believe if you're not familiar with the features and characteristics of the two-wheelers. But it's true and here's why:

1. THE MOTORCYCLIST HAS UNLIMITED VISIBILITY WHICH ALLOWS HIM TO SEE DANGER APPROACHING FROM ALL SIDES. To be able to spot danger and avoid an accident is an important advantage that the motorcyclist has over the operators of other vehicles. His exposure affords him an unobstructed view that other drivers don't have. With this advantage, he can spot a dangerous situation and take the necessary evasive action in time to avert an accident.

2. THE MOTORCYCLE'S SMALL SIZE AND AGILITY ENABLES IT TO AVOID DANGER. You would be surprised at how many times cyclists have escaped injury because they were able to quickly maneuver their bikes into spaces where other vehicles weren't able to go. In heavy traffic, the cycle's "smallness" is definitely an important advantage in this respect.

3. SINCE HE IS CONTINUOUSLY EXPOSED TO FRESH AIR WHEN RIDING, THE MOTORCYCLIST IS KEPT ALERT. Having the continuous stream of fresh air on the rider's face and body keeps his senses sharpened. Compare this with the motorist who is "boxed-in" and breathing stale air. It's no wonder that so many motorists aren't quick enough to spot danger in time to avoid an accident.

4. RIDING A MOTORCYCLE DEVELOPS FAST REFLEXES, GOOD COORDINATION AND TIMING. When you ride a bike, these faculties become developed to a noticeable degree. They are responsible for making you and your bike blend together to form a smoothly efficient "oneness."

5. THE MOTORCYCLIST ALWAYS HAS HIS HANDS AND FEET ON OR NEAR THE CONTROLS AT ALL TIMES, THEREBY ENSURING POSITIVE CONTROL AND REDUCING REACTION TIME. The throttle, front brake lever, clutch lever, and rear-brake pedal are so positioned that the cyclist has absolute control at all times. During an emergency, these controls can all be operated simultaneously to bring the machine to a quick, safe stop.

6. IN TIME, THE MOTORCYCLIST BECOMES A GOOD JUDGE OF SURFACE CONDITIONS. The ability to study various road surfaces and adjust speed accordingly is one of the most important aspects of riding. Since the rider has only two

wheels, his welfare depends on how well he is able to traverse different surface conditions at different speeds.

7. MODERN MOTORCYCLES HAVE EXCELLENT STABILITY, DESPITE THEIR PRECARIOUS APPEARANCE. Since a bike has only two wheels and is a single-track vehicle, many people can't understand what keeps it up. When it is moving at speed, the spinning wheels produce a gyro-stabilizing action – like that of a spinning top – which keeps it upright and very stable.

8. MODERN BIKES FEATURE HIGH-TRACTION TIRES ALONG WITH EFFICIENT BRAKING AND SUSPENSION SYSTEMS. The motorcycles of today are the result of technical improvements over the years. Those first bikes were the next thing to suicide, according to some of the old-timers. Many of the hard feelings toward motorcycles today are the result of opinions formed of riders and their machines years ago. However, the modern motorcycle is truly a well-designed, safe, and functional piece of machinery. But it's up to the motorcyclist to take advantage of the bike's safety features. Regardless of how safe and functional the best motorcycle in the world is, it still can't think!

Despite all these safety advantages, motorcyclists still get involved in accidents. Why? Most accidents can be attributed to the human factor, which includes the motorcyclist and the "guy behind the wheel." It has been often said that many, if not most, motorcycle-car accidents are due to carelessness on the motorist's part. This is usually true, since most drivers don't look hard enough to spot a small vehicle like a bike. Or they just don't show the rider any respect when they do see him. Many motorists claim they have difficulty in judging the speed of a cycle.

But, often, the motorcyclist "asks" for it by placing himself at the motorist's mercy. Tailing a car at high speed, not slowing down for crowded intersections, riding too close to parked cars, where there's always danger of someone suddenly opening a door, jumping red lights, and weaving in and out of traffic are just a few of the ways by which many riders become involved in accidents.

Even if the bike rider does not set up the conditions for an accident, he is still responsible, in a sense, for what happens to him. By being on his toes and handling his bike properly, the motorcyclist doesn't place himself in awkward situations.

Motorcycling's booming popularity has proved one thing: to safely negotiate today's roads, the rider needs all the experience and common sense that he can muster. Where the new rider is concerned, "rider education" is a must if he is to have a safe and lengthy cycling career. Not only must the motorcyclist be properly educated, but the automobile driver should be trained in how to share the same piece of road with motorcycles.

With the increase in motorcycle registrations, motorcycle accidents have increased, also. Since most of the accidents involve the newer riders, it proves that there is no substitute for experience, which naturally takes time to accumulate. But disproportionate rise in motorcycle accidents also points to a serious lack of proper training in the correct operation of a motorcycle.

As is often the case, too many riders receive too little instruction on how to operate their bikes when they purchase them. This is becoming such a serious problem that many states are proposing special operator's licenses for motorcyclists. Although many riders frown upon such legislation, it is in this writer's opinion a necessary step for reducing cycling accidents.

What many new riders fail to realize is that operating a bike requires somewhat specialized training and techniques. Once a motorcyclist learns basic control techniques, and combines them with common sense, his chances for not "participating" in an accident are better than those of the motorist.

The cyclist's vulnerability seems to place him at a disadvantage, since he has no protection like the motorist. But, surprisingly, most motorcyclists who do manage to "go over the handlebars" don't get crippled or killed. Many just get skinned up a little. Yet, the guy behind the wheel often gets seriously injured when he is thrown against the steering wheel, dashboard, and windshield. Of course, you'll never convince most drivers that a motorcyclist can escape serious injury during a spill or accident, if he is properly dressed.

The next time someone tells you how dangerous motorcycles are, tell him that it has been proved statistically that private flying is EIGHT times more hazardous than motorcycling. This statement is not meant to cast any disparagement on private flying; but it shows you that there are other forms of transportation which are more dangerous than motorcycle riding.

Among its other advantages, riding can make a better car driver out of you, too. A motorcyclist learns how to judge other drivers and their behavior. And this gives him a psychological edge over those who have never ridden a motorcycle. Another important piece of information that a motorcyclist picks up soon enough is that the lack of courtesy on the part of a motorist contributes to dangerous conditions, both for the motorcyclist and other motorists. Combine these advantages that the motorcyclist has with the skills and knowledge picked up while riding, and you can readily see what he has going for him when he gets behind the wheel of a car.

Over the years, as motorcycling becomes more popular, most states are going to adopt legislation which will directly affect you as a motorcyclist. Some of it will be necessary, and unhappily, some of it will do nothing more than restrict the freedom of motorcycling in general. To prevent unfair legislation against motorcycling, motorcycle accidents must be reduced. And this can come about only through conscientious application of safety means by each motorcyclist. This means that each of us must strive to be a better, safer rider than before.

HEY, YOU TEEN–AGERS

IF YOU'RE A TEEN-AGER who is experiencing difficulty in obtaining parental permission to buy a motorcycle, lend an ear. First you must realize that your parents' concern for your welfare is only natural. And if you're a mature individual who respects the rights of others while driving and who can prove to your parents that you're qualified to operate a bike safely, you can stand a good chance of getting one.

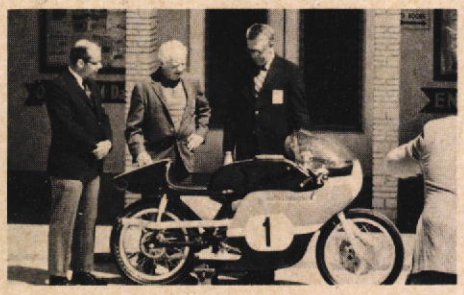
To convince your parents how safe bikes are when they're handled properly, show them magazine articles which deal with safety and the promotion of cycling in general. Have them meet experienced, mature motorcyclists who can tell them of motorcycling's good points and advantages. But, for heaven's sake, don't introduce them to the "outlaw" types, or you can kiss that bike good-bye!

Motorcycle dealers can be instrumental in helping you get your bike. They are in a position to explain to your parents how safe and practical motorcycling can be. The most important thing to remember is that it's up to you to prove to your parents that you can be trusted with a bike. Once they believe this, you'll have that two-wheeler before you know it.

IN THE NEWS

W. T. BERRY, JR. (left), executive director of American Motorcycle Association and R. J. Gail, Champion Spark Plug Company racing manager, inspect contents of Champion's Award Pack to be presented to top 100 National Number Holders in AMA standings. In addition, top ten number holders will receive a Champion racing jacket. Champion is increasing their support of AMA racing thru contingency prize money.

AT Annual Yamaha Dealer Meeting held recently in Las Vegas, a special award was presented to Yamaha International Corporation for their efforts in Motorcycle Safety. Making a special trip from Washington, D.C. to make the presentation, was Douglas Toms, newly appointed Director of National Highway Safety Bureau (NHSB). Toms was former President of American Association of Motor Vehicle Directors (AAMVA), the organization which officially awarded plaque, which was for Development and Implementation of Yamaha Basic Rider Training Program which teaches people how to ride motorcycles. From left: Lou Spitz, Executive Director of NHSB; H. Kawashima, Executive Vice President & General Manager of Yamaha International Corporation, and Douglas Toms.



DAYTONA BEACH TV crewman records an historic moment for Bill Tuthill's Museum of Speed. Tuthill, center, receives a Harley-Davidson KR flathead racer in full Daytona trim from John A. Davidson, left, Vice President-Sales and Dick O'Brien, Chief Racing Engineer of Harley-Davidson Motor Co., Inc., Milwaukee, Wisconsin. KR is machine that Cal Rayborn set first over-100 mph average at Daytona Speedway. Rayborn won Daytona 200-Miler in both '68 and '69 on this same KR.

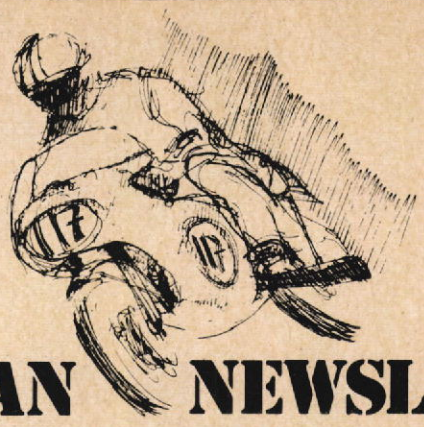
GOOD GUY — Evel Knievel presents Hap Jones mini-bike to lucky young lad during intermission ceremonies at recent motorcycle event in San Francisco's Cow Palace. (Walt Mahony photo).

DURING recent Florida visit, E. C. Smith, right, former Executive Secretary of AMA, stopped in to see T. A. Hodgdon, former president of BSA Incorporated, and longtime motorcycling enthusiast. They are admiring photo of C. B. Franklin, one of Indian's early-day engineers.

FAVORITE PASTIME and anything but a gamble is motorcycling for Harold Smith Sr., president of Reno's famed Harolds Club. Smith took up motorcycling about five years ago. Reno residents are accustomed to seeing Smith on his Harley-Davidson, but tourists often do a double take when they spot the noted professional gambler out for a spin.

SALES TEAM of American BSA sales executives have first-hand look at factory operations during recent visit to BSA in Birmingham, England. Quality control manager Vic Gray (second from left) explains some points of gear cutting to some of the group.

JEFF SMITH, BSA moto-cross ace and twice 500cc world champion, has been awarded the MBE (Member of the British Empire) for his services to motorcycle sport. Last year he took part in an extensive moto-cross lecture tour of the United States.



Mick Woollett's

EUROPEAN NEWSLETTER

SPANISH G. P. – Greeves rider Bryan Wade shown on his way to 4th place in 250cc feature event. This was his best moto-cross G. P. placing so far.

EUROPE is still buzzing with the excitement generated by Daytona and the tremendous speeds set by the new generation of 750cc multi-cylinder racers. And the first positive reaction comes from custom-king Paul Dunstall who has already decided to have a crack at your American classic next year.

"All my American dealers tell me that I've got to race at Daytona, so I've decided to take their advice." said the 35-year-old Londoner who made his name racing Norton twins before going into the goodies trade.

Dunstall's main line of business nowadays is selling customized hand-built bikes with Norton, Triumph and BSA engines. In British events his two riders, Ray Pickrell and Ken Redfern use 750cc Norton-powered racers plus Dunstall-Nortons in production machine events.

"For Daytona we will stick to the Norton engine. By spending time and money I'm confident that we can boost the power to a genuine 75 bhp, three more than our best motors give now," said Paul. He realizes that others will have more horse power, but aims to combat that by cutting the weight drastically, ensuring that his bikes (he plans to run a team of two at Daytona) have the best possible streamlining, brakes and riders.

"My aim is to get the weight down to 280 lbs. This is 30 lbs. lighter than my present racers, but it is not an impossible target.

Paul now plans to limber up for Daytona by attacking the one-hour world record for the 750cc class. One of his 750cc Dunstall Nortons took the record at Monza in 1967 when Rex Butcher packed 126.7 miles into the hour – and that was on a roadster complete with mufflers and lights. Moto Guzzi broke the record last July when Vittorio Brambilla pushed the record over the 130 mph mark.

The record attempt will probably be made in July or August. "It will give us a chance to try out some of the new ideas that we have for Daytona," said Paul. Certainly it is good to see this relatively small British manufacturer taking on the big factories and those who know him won't underestimate him.

* * *

BACK FROM DAYTONA, Australian Kel Carruthers, winner of the 250cc class in Florida, started the European season in good style when he won the 250cc race at Cesenatico defeating Santiago Herrero, the Spanish Ossa works rider who ran Kel close for the world championship last year.

Carruthers then visited the Benelli factory to discuss plans for this summer. Last season he won the 250cc world title on one of the Italian factory's four-cylinder machines. But now the 250cc category is restricted to twins and Benelli has no suitable machine.

However they have promised him a four-cylinder 350cc racer for the world championship events, a lightened version of the model on which Renzo Pasolini defeated MV star Giacomo Agostini to win last year's 350cc Italian championship.

While at the Benelli works Kel put his Don Vesco-prepared Yamaha engines on the test bed. The Daytona winning 250 recorded 48 bhp, four up on the factory claimed figure, while the 350cc engine gave exactly 54 bhp, the catalog figure.

From Benelli, Carruthers travelled up to Austria to race, in a snow shower, at Zeltweg. There he won both 250 and 350cc events. The 500cc class went to England's Steve Ellis on a Linto with New Zealander Keith Turner on another into second.

* * *

THE ITALIAN ROUND of meetings started at Rimini and Phil Read, fresh from successes in South Africa, got away to a good start by winning the 250cc race

there. But in the 350cc he ran into trouble. On his Yamaha he tried to outbrake Pasolini (Benelli) during a rain storm and crashed heavily breaking his left wrist and aggravating an old back injury.

He was carted off to the hospital and encased in plaster. During the following week he escaped and is now convalescing at a hotel, determined to race just as soon as he can get his leg over a bike.

Pasolini won the race from which Agostini retired before turning out to win the 500cc class unchallenged. A week later at Modena, close by the Ferrari factory, Agostini gained revenge and passed Pasolini on the last lap to win the 350cc race going on to score a double in the 500cc race.

But in the third meeting, at Riccione, Pasolini scored in the 350cc race, beating Agostini by 13 seconds. At this meeting Pasolini also turned out on a four-cylinder Benelli in the 500cc class, the first appearance of the big Benelli since Hailwood raced one in the Italian Grand Prix in 1968. But he retired with gearbox trouble and Agostini won again.

* * *

OTHER RACING NEWS is that three of the four Daytona CB750 Hondas have been flown to Europe. They will be kept in France and will be raced in the 24-hour Bol D'Or event which allows racing machines and in the Barcelona 24-hour which has a class for "prototype" bikes in addition to production machines.

For the Isle of Man TT Honda are preparing other CB750s. At first the plan was to use the Daytona bikes, converting them back to roadster specification so that they could pass the strict regulations for the Production Machine TT. But when it became obvious that it would be easier to prepare new bikes the plan was changed.

But just who will race the Hondas in the TT is not yet known. There are only a handful of riders capable of getting the best out of big, heavy and very fast stock motorcycles around the tricky 37.7-mile road circuit in the Isle of Man and competition for the top men will be keen.

* * *

ON THE SCRAMBLING scene Greeves is rejoicing following a sensational showing by Vic Allan, their Scottish works rider. Vic won both 250 and 750cc classes of a British television scramble one Saturday and then travelled overnight to beat all the Continental aces in Holland at St. Anthonis, traditionally the first really big international of the year.

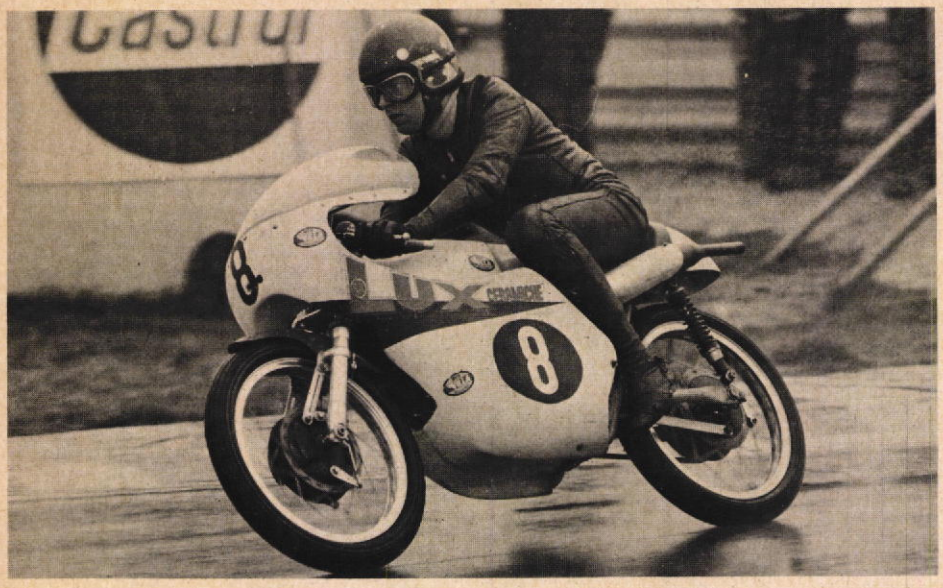
Because of an airways strike Vic rode a standard Greeves in the Dutch event and among his victims were 500cc world champion Bengt Aberg (Husqvarna), Roger De Coster (Jawa-CZ) and Olle Pettersson (Suzuki).

Suzuki have also had something to cheer about. Riding one of the new 370cc models, new signing Sylvain Geboers (last year a works rider with Jawa-CZ) won an international moto-cross meeting at Herentals in his native Belgium. And among his victims was Aberg, who finished second overall, DeCoster, Adolf Weil (Maico) and Jeff Smith (BSA). But of course these were both warming up events for the world championship rounds ahead. When the chips are down we can expect more forceful riding from world champions Aberg and Joel Robert.

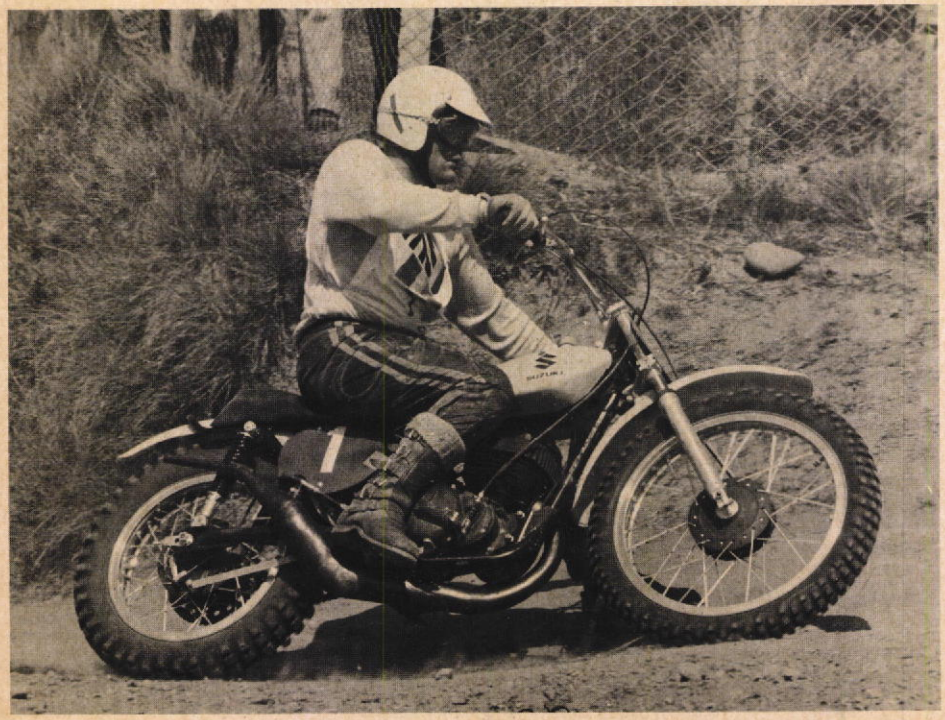
* * *

LATE NEWS: The reigning moto-cross world champions dominated the opening rounds of the 250 and 500cc championships which opened on the same day, the 250 with the Spanish Grand Prix, the bigger class with the Swiss Grand Prix.

Riding a Suzuki for the first time in a championship event, Belgian Joel Robert won both races in Spain to score a clear-cut victory with Suzuki team-mate Sylvain Geboers in second place ahead of veteran Swede Torsten Hallman (Husqvarna), Bryan Wade (Greeves), Malcolm Davis (AJS) and Roger De Coster (Jawa-CZ). Five makes of machine in the first six places.



YOUNG Charles Mortimer, son of an old-time Brooklands racer, currently dominates lightweight classes in Britain, riding a 125cc Italian-made Villa and a 250cc Yamaha. (Shown here on the Villa.) He is sponsored by former car racer, Lord Denbigh.



WINNING his first big race since signing on with Suzuki, Belgian Joel Robert is shown on his way to the checkered flag in 250cc Spanish Moto-Cross Grand Prix.

"Santa Maria" $7.95
Brn., Beige, Chocolet
S, M, L & XL

"El Batisto" $8.95
Natural Leather Color

"El Rincon" $.7.95
Brn., Beige, Chocolet
S, M, L & XL

"Viva Zapata"
$8.95
Brown,
Beige,
Chocolet
S,M,L&XL

"El Latigo"
$4.95

"El Conquistator"
$6.95

"El Ringo"
$7.95

Handcrafted in Mexico by our "Latin Village" artisans. Send check or money order with size and style. Add $1 for postage and handling. Send 25¢ for catalog. Dealer inquiries invited.

LATIN VILLAGE, P.O. Box 3428, Dept. C-1
Santa Barbara, California

REPLACEMENT PARTS
For ALL Motorcycles
Plus
Custom Accessories
UP TO 50% DISCOUNT

Send 75¢ For Catalog To:

HOUSE OF IMPORTS
P.O. Box 8535 Fountain Valley
Dept. M Calif. 92708

MOTO MORINI
Motorcycles & Parts
AMERICAN CIMATTI, INC.
612 Chenevert Street
Houston, Texas 77002
Ph. 228-8788

SUNSET TRIPPER
Parts & Accessories

Send 25¢ For Catalog

SUNSET TRIPPER
1329 N. Hollywood Way
Burbank, CA. 91505

STAHLWILLE TOOLS

Metric — Whitworth — SAE
Mechanic's Quality — Moderate Price
Available At Leading Motorcycle Dealers

LOUIS PIERLOT — Importer
716 Vesta St., Inglewood, Ca. 90302

Please Say You Read It In 'motorCYCLIST'

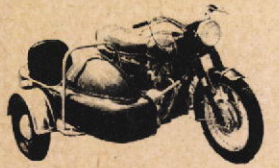
RIDER and WORKSHOP MANUALS

AJS/Matchless, Ariel, BMW, Bridgestone, BSA, Ducati, Honda, Harley-Davidson, Indian, Jawa, Lambretta, Marusho, Moto-Guzzi, Norton, NSU Prima, Pannonia, Puch, Royal Enfield, Sunbeam, Suzuki, Triumph, Velocette, Vespa, Villiers, Vincent, Yamaha, Zundapp.

Parts & Accessory Catalog: $1.50

TRIANGLE
2157 W. Harrison St., Chicago, Ill. 60612

DOUBLE UP WITH BINGHAM MK-I SIDECAR



Fits Any
Motorcycle
High Quality
Low Cost
Do-It-Yourself
Kits

From SIDE STRIDER, Inc.

Write or Call For FREE Brochure to:

SIDE STRIDER, INC.
15838 Arminta St., Unit 25, Dept. M
Van Nuys, Calif. 91406 - Call 213/781-9908
COMPETITION MODELS AVAILABLE

Super Tuners Use STA-LUBE Waterless Hand Cleaner. It's Grease & Grime's TOP ELIMINATOR!
STA-LUBE, INC.
3039 Ana Street, Compton, Calif. 90221

SPORT SLANTS

Continued from Page 22

7-Mile Amateur Final

1-Doug Sehl, Canada ..... Triumph
2-Ron Butler, Mich ..... Triumph
3-Tod Sloan, Calif. ..... Triumph
4-Gary Fisher, Pennsylvania ..... Triumph

RICE, BSA, TOPS PALMETTO NAT'L

JIM RICE, Palo Alto, California, won the AMA sanctioned 20-lap ½-mile dirt track national championship at Palmetto, Georgia on April 19th. The BSA rider covered the 20 laps in a winning time of 10:55.24.

Dick Mann, of Richmond, California, was the second racer to take the checkered flag. Mann rode a BSA.

Norton-mounted Jack Warren of Clio, Michigan finished third.

The three Expert heat races were won by Rice, Mann and Warren. Ray Little of Atlanta, Georgia, won the Expert semi.

Mann grabbed an early lead but after seven laps, Jim Rice took over. Rice and Mann dueled wheel-to-wheel for the remainder of the race and it was Rice who was able to grab the top honors.

During qualifying, Jim Maness rode his Harley-Davidson to a fast one-lap time of 31.60.

Canadian ace, Doug Sehl won the 14-lap Amateur final event. Sehl's Triumph toured the course in a time of 7:43.46.

Close behind Sehl was Triumph-mounted Gary Fisher. Maurice Fraser on a Triumph, filled in the third slot.

Fisher was the fastest amateur qualifier with a time of 31.87. Fisher and Sehl were the two heat winners.

AMA 10-Mile National Championship

1-Jim Rice, Calif. ..... BSA
2-Dick Mann, Calif. ..... BSA
3-Jack Warren, Mich. ..... Norton
4-Jim Maness, Georgia .... Harley-Davidson
5-Bart Markel, Mich. ..... Harley-Davidson
6-Don Castro, Calif. ..... Triumph
7-Charles Seale, Missouri . . Harley-Davidson
8-Larry Palmgren, N. J. ..... Triumph
9-Roger Reiman, Ill. ..... Harley-Davidson
10-Gene Romero, Calif. ..... Triumph
11-Ray Little, Georgia ..... Harley-Davidson
12-Joe Barringer, N.C. ..... Triumph

7-Mile Amateur Final

1-Doug Sehl, Canada ..... Triumph
2-Gary Fisher, Pennsylvania ..... Triumph
3-Maurice Fraser, Canada ..... Triumph
4-David Rupe, Okla. ..... Triumph
5-Bob Gill, Fla. ..... BSA
6-Charles Thrune, Mich. ..... Triumph
7-Wallace LaMastus, Ind. ..... BSA
8-Dale Taylor, Kentucky ..... Triumph
9-Robert McCormick, N.C. ..... Triumph
10-Ronald Butler, Mich. ..... Triumph
11-Bobby Shelton, Ala. ... Harley-Davidson
12-Don Taylor, Georgia ..... Triumph

GO-CART PLANS

BUILD COMPLETE FRAME FOR LESS THAN $10!

EASY TO BUILD

RUSH $2 for plans

RUSH YOUR ORDER!

Exciting new plans reveal step-by-step details with drawings

Go-Kart,
Box 371. Holliston, Mass. 01746.

Back Issues

1963

JUNE—Velocette for 1963—Hare & Hound Championship — BMW Owners Picnic — Twoupmanship — Sire Clippe on Transistor Ignitions — Northwest Double-Header—Yamaha Factory Reception—AFM Race at Stockton—AMA-Approved Models for Competition—Spot Disc Brake Kit....50c

AUG.—Hi-Fi Record Review—Heidelberg Race—Isle of Man T.T.—Laconia Races—Mexico Travel Tips—Santa Barbara Road Race—Picture of the Month—Little Burr and Greenhorn Enduro Results—San Diego Picnic 50c

NOV.—Racing at Vineland — Jack Pine Run — Dodge City G.P.—Pictorial—Marlboro Road Race —East vs. West Scrambles—8 Mile Nat'l at Ascot — Misfits Ride Again — Tiger Stevenson Biography 50c

DEC.—150-Mile Enduro — 20-Mile Nat'l at Sacramento—Wm. Johnson Invitational—U. S. Branch for Suzuki—Parilla for 1964—Enduro Pictorial—New Honda Hdqtrs — Surtees Interview 50c

1964

APR.—San Diego Awards Night—High Percentage Triumph—4-cyl. Ducati—Ascot T.T.—2-Wheeled Volkswagen—Sir Clippe on Japanese Designs—Ariel 75cc Pixie Introduction—Thoughts on Wearing a Helmet 50c

MAY—Daytona (AMA)—Off-the-Road Fun (pictorial)—Sebring—Sir Clippe on Choosing Right Motorcycle Trailblazers Meeting—BSA Service School 50c

JUNE—New York Preview—Royal Enfield Road Test—Sir Clippe on 2- and 4-stroke Engines—Moto-Cross Specials—Lower Calif. Tour—Euroupe's G.P. Courses 50c

JULY—Greenhorn Pictorial—BSA 350cc SS/90 Road Test—Alaska Tour—BMW Picnic—Hillclimb Pictorial—Racing at Vineland—Cinema Cycling—Cartoon Page—Frontier Day Ride 50c

AUG.—Heidelberg Race—Little Burr Enduro—Isle of Man T.T.—Honda Owners Fun Festival—Hare & Hound Title—New Yamahas—Whine of the Blower (History of Super-Charged Racing Motorcycles)—Greenhorn Enduro—Mr. Ascot (Elliot Schultz)—"Pop" Armstrong Testimonial—BSA Starlite Announcement 50c

SEPT.—San Diego Picnic—Buckeye Classic—10-Mile Title—8-Mile Title—Scrambles—How the West Was Fun (cartoon spread)—H-D Dealer Meeting—1965 Ducatis—Vacaville Road Racing—Milwaukee (Bonneville) Missiles—Vineland Road Races—AMA Insurance Program 50c

OCT.—Finnish 50cc Lightweight—Coast-to-Coast . . . Almost!—Windber Road Race—Greenwood Road Races—H-D at Bonneville—Relay at Riverside—Miss Honda Pin-Up—Cartoon Page—1965 Harley-Davidsons—Meadowdale Races—Springfield—Hillclimb Title—Yamaha Reception—Movin' McEvoys 50c

NOV.—Reiman Wins Nat'l Crown and Boosts 250cc Record to 156 mph—20-Mile Title—Ascot T.T.—Bonneville Speed Week—Jack Pine Enduro—Corluroy Enduro—Vineland Races—Dodge City G.P.—Johnson Invitational Run—150-Mile Enduro—Peoria T.T. 50c

DEC.—British Drag Festival Highlights—Death Valley Tour—Sporty Type (fiction)—Sandy Lane Enduro—New Home for Yamaha—Breedlove at Bonneville—Ducati 250cc Monza Road Test—What Is a Classic? (Eastern issue. In Jan. '65 Western issue) 50c

1965

JUNE—Art Herrington Profile—Tire Tips—Daytona Races (AMA & USGP)—Showtime—Ohio Race Pix—Benelli 125cc Sprite Road Test—Modernday Ranchers—Yamaha Safety A-Go-Go—1965 Maicos—Trailblazers Pictorial—500cc Ducati Twin Unveiled 50c

AUG.—Board Track Racing Memories—10-Mile Title—Sierra Safari—Motorcycle Lubrication Tips—Laconia Races—Isle of Man T.T.—Little Burr Enduro—Electronic Ignition 50c

OCT.—Trade Association Merger — Close Look at 360cc Jawa-CZ Scrambler — Coast-to-Coast Record Runs of the '30s (Part 1) — BSA Thunderbolt Rocket Road Test — 1966 Harley-Davidsons — Peoria T.T. — Springfield, Race of Year — Ascot National — T.T. Scrambles Title — Chain Care — Go-Matic Sprockets — Yamaha's Bonneville Entries 50c

NOV.—Englishman's Impressions of Sport in So. Calif.—Sacramento 20-Mile Nat'l—Int'l Six Days Trial—Coast-to-Coast Record Run History (Part II)—Who Is the Greatest? (Eastern issue)—Marlboro 75-Mi. Nat'l—Bonneville—Jack Pine Enduro—Yamaha Big Bear Scrambler Road Test—Brighton MC Show 50c

DEC.—Suzuki X-6 Hustler—Roeder's H-D "World's Fastest 250cc" Record at Bonneville—Japanese G.P.—American's Impressions of Int'l Six Days Trial—Suzuki 150 Road Test—Enduro Round-Up—Johnson Invitational Run—How to Store Your Motorcycle—Corduroy Enduro—Touch of Royalty—Cactus Derby—The Rider's Tailor 50c

1966

JAN.—1966 Models Approved for AMA Competition—Data on Safety—Death Valley Run—Norton & Ducati for '66—Yamaha Dealer Trip to Japan—Hodaka Ace 90 Test—Ascot Recap—Florian Camathias Tribute—Yanks Sample English Scrambles—Minutes of AMA Competition Committee Meeting—Introducing Moto-Guzzi 50c

FEB.—Harley-Davidson Expansion Plans—Snow Cycle Conversion Kit—BSA for 1966—Testing the Bultaco—Another Wild One—Who Is the Greatest? (First of Two Parts)—Fairings for Road Riders—Japan's New Road Race Course—Benelli & Parilla for 1966—Road Racing's Increasing Popularity—Triumph "Twin Test" (650cc Bonneville and TR6/R)—What About Motorcycles?—Hagon Custom Dragsters 50c

MAR.—Triumph for '66—Public Relations and the Motorcycle—Who's the Greatest? (Part 2 of Two Parts)—1966 Greeves—Hagon's Dragster—Numbers Game—Parilla Wildcat Scrambler Test— Suzuki Awards Banquet—Enthusiastic Collector—Saucy H-D Sprint—Home-Built Twin—New Home for Suzuki 50c

APR.—Greeves Twin Road Test—Mom and the Motorcycles—World's Longest Road Test—Road Racing Bid (Rickman Bros.' Metisse)—Cartoon Page—MB for '66—Grand Prix Pictorial—Honda Hybrid—Photo of Month (Les Graham on MV-Agusta)—Technical Topic: Gearing—Home-Built Four—BMW Service Schools—MS & ATA Annual Meeting 50c

MAY—AMA Races at Daytona—BSA Spitfire & Victor Road Tests—Yamaha Twin Jet 100 Road Test—4-Cylinder. NSU Mammoth—Motorcycling in Mexico—Racing in Japan—European Specials—Dealer Receives Royal Awards—Ice-Cycle Racing—Tribute to Former Publisher Welch—Pre-War British Racing Sport—New British 3-Wheeler—Minter's '66 Racing Mounts—Japan's FISCO Racing Circuit 50c

1969

MAR. — Road Tests: Suzuki T-120 ,Yamaha AT-1 — BSA For 1969 — Tips On Buying a Used Motorcycle — How To Build An Off-Road Racer — Orr's Fours — Scultured Tank For $3 — The Bearded Baron — Study of 4-Stroke Engine (Part 4) — Custom: The Spider — Touring & Camping (Death Valley Revisited) — Grand Prix Scene, 1968 Review of Rare Racers — Jawa 'Single Pipe' 360 Moto-Cross 50c

APR. — Road Tests: BSA 650 'Firebird', Sears SR 125 — Elephant Rally — Triumph For 1969 — Pikes Peak Tour — Rickman 8-Valve Conversion Kit for 650cc Triumph — Historical: Golden Jubilee TT — Condenser Know-How — Harley-Davidson ERS That Went to Baja — Touring & Camping (Harley-Davidson Rides Reviewed) — Study of 4-Stroke Engine (Part 4 Cont'd) 50c

MAY—A Look at Riding Apparel - Budget Boondockers - Golden Age of the Fours (Part 1) - Houston Astrodome Race - Road Tests: Kawasaki Mach III, Indian "Boy Racer" - Custom BMW - How To Repair Stripped Spark Plug Hole - About Those Laws - Ask Jim - Travel: Earthquake Country (Yellowstone Park) - Touring & Camping (Lure of the Desert) - How To Build Motorcycle Work Bench .....50¢

NOV. Sears Point Road Race — Bonneville '69 Nat'l Hillclimb — Road Tests: Moto-Guzzi V750 & Bultaco 125 Lobito — Mini-Bike Corner — Budget Sidecar — Rare & Rapid (One-of-a-kind racers) — Touring & Camping (New Ideas For Packing Your Bike) — BMW For '70 — Desmodromic Ducati History — Salinas Scrambles — Study of 4-Stroke Engine (Chapter 5, Part 2) — 1968 Motorcycle Registrations 50c

DEC. — Road Tests: American Eagle 405 & Jawa-CZ 250 Moto-Cross — Special Report: Hodaka Conversion Goodies — For Services Rendered — Jack Pine Enduro — Show & Go Triumph — Sacramento Mile — Quest For Speed (Historical) — Mini-Bike Corner — Touring & Camping (3 Days With 4 Bikes) — Year's Toughest Moto-Cross — Golden Age of Fours (Chapter 5) — Build A Kawasaki Super Bike 50c

1970

JAN. — Road Tests: BMW R60/5 Bavarian Tour Test, Norton 750 Commando & Ossa 250 Stiletto — Beginner's Luck — 1968 & '69 Motorcycle Registrations — AMA Joins FIM — American Scene — About Those Laws — '70 Kawasakis — Ascot Nat'l — Winterizing Your Bike — Too Good For Just The Young — Touring & Camping (Recent Developments) — Golden Age of Fours (6th & Final Chapter) — Suitcase Saddlebags — Boy's Racer (AJS & Matchless Road Racer History) — Impressions of Int'l 6 Days Trial — Mini-Bike Corner 50c

FEB. — Road Tests: Honda 350 SL & Harley-Davidson Leggero — Baja 1000 — Protective Clothing — Tokyo Show — Touring & Camping (New Accessories) — A Sport Is Born — Eastern Enduros — 1970 Suzukis — Mini-Bike Corner — Hopetown G.P. — Study of 4-Stroke Engine — Travelin' Trailer 50c

MAR. — Road Test Reports: BSA 250 Starfire & Indian 100 Moto-Cross — Honda Mini Trail Hop-Up — Compression Release Report — A Look At Inter-Am — BSA For 1970 — Safety On Two Wheels — Ascot TT — Immortal Record (Historical) — A Look At Motorcycling Today — Touring & Camping (How To Carry Motorcycles With Campers & Trailers)—Mini-Bike Corner—Custom In A Box—Goldstar Cowtrailer 50c

APR. — How To Build A Tuned Expansion Chamber For Under $5 — Road Test Reports: Harley-Davidson FLH & Suzuki Maverick 50 — Fuel Injection For Your Motorcycle — Triumph For 1970 — Personality Profiles: Stanley Woods (First of 2 Parts) & John Penton — Economy Fork Extensions — I'll Remember Floyd (Editorial Tribute To Late Floyd Clymer) — Travel: Pratt's Odyssey — Historical: Suicide Saucers — Touring & Camping (Observations, Plus Hints From Readers) 50c

MAY — Basics of Carburetion & Spark Plug Reading — Road Test Reports: Kawasaki Trail Boss 100 & Triumph Trophy 250 — Hi-Mountain Enduro — Astrodome Races — Blown Four — Mini-Bike Corner — Touring & Camping (Three Great Tours) — Stanley Woods Profile (Part 2 of 2 Parts) — London Show — Hillclimb Pictorial — Kicking Out A Fork Head — First Time (Racing Novel) — BMW Wankel — Yamaha 250 Four 50c

JUNE — Spotlight On Speed — Road Test Reports: Yamaha 250 Moto-Cross & Hodaka 100 "B" — Daytona Race Week — BMW Six — Mint 400 — Custom: Moonwalker — Perfecting Your Path-Picking — Mini-Bike Corner — Dutch Show — Tire Topics — So You Want To Be A Motorcycle Racer? — Touring & Camping (Passports & Visas) 50c

All Issues 50c Each or 5 for $2.00

PLEASE PRINT PLAINLY

motorCYCLIST, P. O. Box 638, Sierra Madre, Calif. 91024

Please send me the following motorCYCLIST back issues _____

_____

Enclosed find $_____ Cash ☐ Check ☐ Money Order ☐

NAME _____

ADDRESS _____

CITY _____ STATE _____ ZIP _____

If any issues requested are sold out, substitute _____

_____

PLEASE DO NOT TAPE COINS TO COUPON

CLASSIFIED

Advertising in this section is available at 20¢ per word (including address). Minimum charge: $3 (15 words). Payable in advance. Send copy and payment to Adv. Dept., MOTORCYCLIST Magazine, Box 638, Sierra Madre, California 91024.

MOTORCYCLE BOOK LIST — Monthly catalog of books, magazines, handbooks, shop manuals. Send dime for specimen, dollar for year. VIVIAN GRAY, Hurstpierpoint, Sussex, England.

"TRIPLE CHROME PLATED—All parts beautifully plated. Give us make of cycle when writing for free price list. Dealer inquiries invited. W. Swirin, Dept. M, 2446 3rd Street, Fort Lee, New Jersey. 07024. Phone: 201-947-3092.

INDIAN engine and parts service. Send stamp for list. Chuck Myles Indian Co., Sloansville, N.Y.

EXTENDED fork tubes. One piece, centerless ground 10/40 steel alloy. 6, 7, 8 inches up for Harleys, Triumphs, BSA etc. Easy to install. Complete kits. FRANK, 1130 Florence, Evanston, Illinois 60202.

MOTORCYCLE ACCESSORY MANUFACTURERS—Silencers, Exhaust Pipes (for every make), Handlebars, Fenders, Crash Bars, Legshields, Sprocket Pullers, Pannier Frames, Valve Tools, Gas Tanks, Luggage Carriers, etc. Trade—Wholesale and Export Only Supplied—Write for list: MOTOR CYCLE EQUIPMENT (B'ham) LTD., Watery Lane, Birmingham 9, England.

NEW & USED PARTS — for Harley-Davidson, Indian, Henderson, Ducati, TWN, Hoffman, Maico, Horex, Norton, Zundapp, Victoria, JLO, Fichtel & Sachs, Jawa, Marusho, etc. Triangle, 2157 W. Harrison, Chicago, Ill. 60612.

RIDING LEATHERS. Finest quality leather motorcycle jackets, shirts, pants, belts, boots, gloves, vests, helmets, raingear. Whitworth and metric wrenches, accessories. World's lowest prices. Immediate delivery. Catalog 25¢. HERMS LEATHERTOGS' Dept. M, 12 No. 7th St., Easton, Pa. 18042.

BMW OWNERS — Aluminum flywheel $54.50. Large capacity finned aluminum oil pan $24.95. Light spring retainers $10.95 set. Large inlet valves. Bowman Products, 2546 Manhattan Ave., Dept. M, Montrose, California 91020.

SPARES—PROMPT mail order service for BMW—TRIUMPH—BSA—VESPA. U.S. Distributors for CRAVEN EQUIPMENT and BARBOUR SUITS. Write or phone: SLEGERS-FORBES CO., INC., 19 Ridgedale Ave., Whippany, N.J. 07981. Tel. 201 / 877-4455.

CLOSING OUT—New and used parts for older models of Harley, Indian, "X" and Henderson. Rims and spokes 18" to 21". Wheels respoked. List 25¢. Entire inventory for sale. Ballak & Co. 811 N. 9th, St. Louis, Mo. 63101.

MOTORCYCLE Camping and Touring Gear Tents, sleeping bags, duffle bags, camping goodies, apparel, bike accessories, campfire musical instruments. Everything chosen for cycles. FREE CATALOG. Great Outdoors Enterprises, Box 1603C, Lynwood, California, 90262.

KIDNEY BELTS — Three buckle kidney belts. Sizes 28-40. Send 5.95 + .50 postage to PIT STOP, P. O. Box 2372, Orange, Calif. 92667.

FREE — Circular Country Records and Tape Cartridges — Fiddle Tunes - Blue Grass - Folk - UNCLE JIM O'NEAL, Box AMM, Arcadia, California 91006.

FOR SALE. Yamaha Motor Cycle Agency and Small Engine Repair. At bargain price. P. O. Box 962, San Marcos, Texas 78666. Phone 392-2304.

CAMPING/TOURING GEAR for bikes. Tents, sleeping bags, duffle bags, camping goodies, apparel, bike accessories, campfire musical instruments. Books, Botas, tools, toothbrushes. Free catalog. Great Outdoors Enterprises, Box 1603C, Lynwood, Ca 90262.

"LEARN TO WHEELIE." Not 100 feet, not 200 feet, but as long and as far as you want. This 38 page instruction manual contains 8 chapters with 9 full page photographs and diagrams. Be a Wheelie Whiz! $2.98 plus 15c Sales Tax. Barnard Publications, Dept. D22, Box 158, Saugus, Calif. 91350.

TOURING & CAMPING

Continued from Page 28

along with someone with the brand you want and switch machines for a piece.

Look for some of these undesirable characteristics as you try the new model, then ask yourself whether they are important enough to disqualify the bike as a comfortable touring machine. If some are found you might determine whether they can be corrected without too much expense or trouble if the cycle is otherwise satisfactory. It is much better to go through this procedure before buying the motorcycle than afterwards when you will be stuck with it.

Does it vibrate through the handlebars, foot pegs, seat?

How much clutch-slipping is necessary to get it rolling from a dead stop? If excessive, first gear is too high.

Does it conspicuously lose power at low rpm's?

Can you find neutral gear without too much fishing when you come to a signal?

Does the engine run erratically in slow traffic?

Does the throttle require a constant hand grip to keep it in place? If so, can it be tensioned?

Does it start hard when cold *or* not? Would it be better with a self starter?

Any one of these items can be a determining factor in making a decision. Use them as well as some of your own, and do not overlook the possibility of purchasing a used machine. A low mileage used bike may be better than a brand new one if it has had good care. At least it should be free of some of the bugs that plague new ones and you will be relieved of the chore of breaking it in.

Aside from size, power, and comfortable riding characteristics, a good touring machine must have adequate lights, brakes, and seat, and be equipped with accessories for carrying touring and camping equipment. Such items as top fairing, directional signals, radio are nice to have as extras which make for more comfort and added safety.

Tires with the proper tread are important too. Although some touring machines are sold with a ribbed tire in front and a universal on the rear, a proven combination for pavement travel, I prefer to run the universal tread on both tires and the same size wheel and tire fore and aft. On a cycle with interchangeable wheels such as the BMW this makes for easy switching of tires to achieve maximum wear and increases the versatility of the bike for running on gravel or dirt as well as on pavement. The Dunlop K70 is an example of a universal tread, the Goodyear All Tread.

The cost of a good touring machine may well run into four figures. It is very discouraging to spend that much money and come up with something that is nothing but a disappointment. Some investigation ahead of time may save headaches and money, and add to the thrill of owning an adequate and dependable piece of machinery.

BUILD AN ALARM SYSTEM

Continued from Page 36

moment someone tries to move it, the horn begins to blow. It's as simple as that. Here is how it's done.

As you don't want to add any more weight to your motorcycle, the entire set-up that we've mentioned above must be connected in conjunction with your existing horn. If your motorcycle doesn't have a horn, you will have to install one. As you can gather from looking at the simplified schematic drawing, you will have to have a battery. Without a battery this set-up will not work.

Unless you ruin your mercury switch by tearing it apart, it's pretty hard to tell what is going on inside it. A mercury switch is nothing more than two electrical contacts encapsulated into a small chamber with a blob of mercury, which conducts electricity beautifully. Try to imagine the two electrical contacts at one end of the chamber and the blob of mercury at the other. If you tip the chamber, the mercury comes rumbling down the chamber or tube or what-have-you, runs into the two contacts and completes the circuit. There's nothing more to it than that.

Now, suppose we took one of these mercury switches and set it up inside your motorcycle somewhere. This could be in one of the tool boxes, up under the gas tank, or darned near any place. Take your bike, and put it on the side stand, which of course will lean it over to the side. You have already drilled the holes for the clamp that holds the mercury switch, so all you have to do is set the angle of the mercury switch while the bike is on the side stand. so that the mercury stays away from the contacts inside the switch. The rest of this we are sure you can figure out for yourself. If the bike is moved to an upright position, the horn will blow.

Even if the horn blows only one time, this is enough to alert you that something has happened to your motorcycle. This might be the neighborhood kids playing with it; it might have fallen over in the street; a car may have backed into it; or someone might actually have tried to steal it. Whatever the problem was, the investment wasn't bad for $5 or less, was it?

TWO-WHEEL TOURING & CAMPING

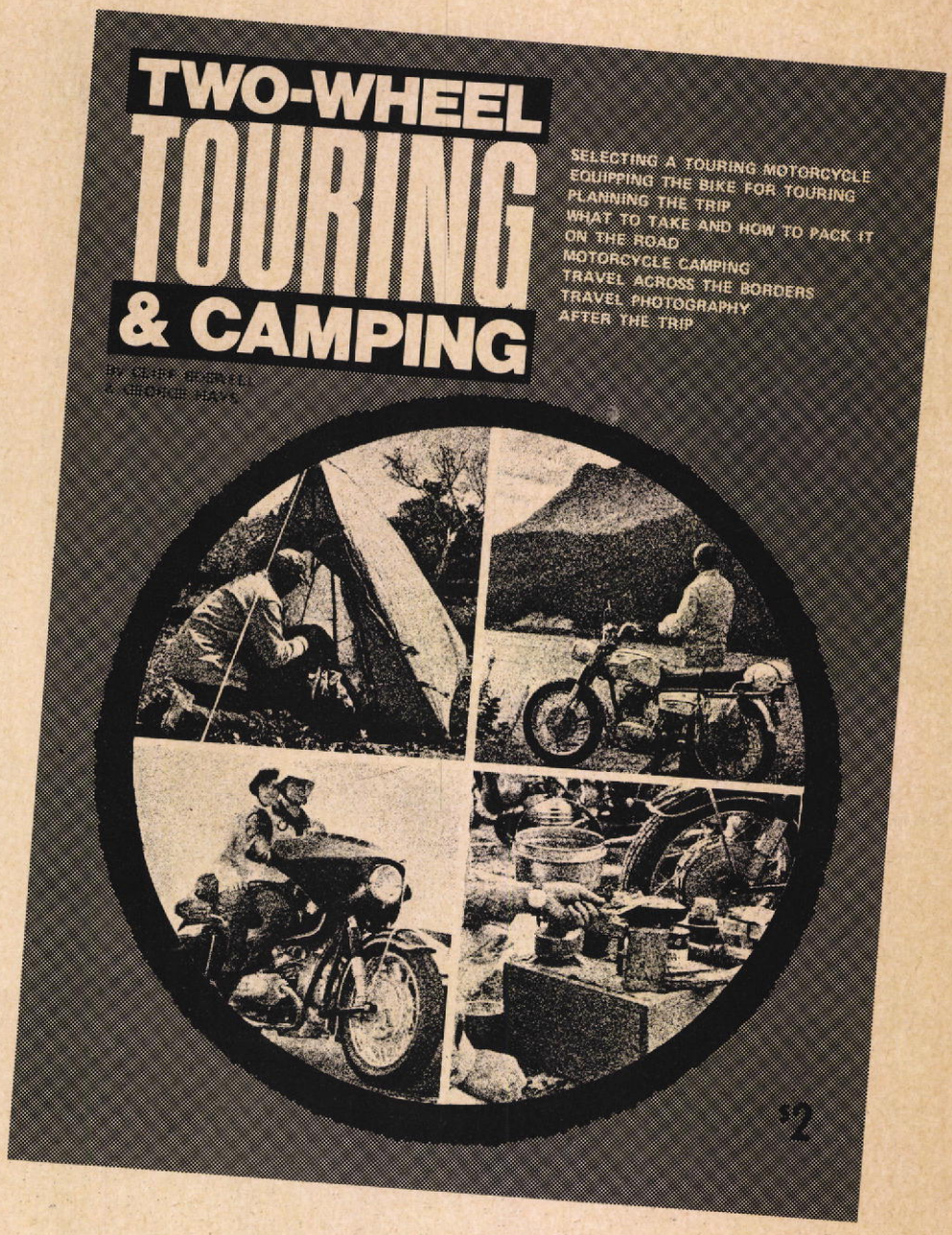
By CLIFF BOSWELL and GEORGE HAYS

Over 80 pages tailored to the adventure-packed field of Motorcycle Touring & Camping. Informative chapters include:

* SELECTING A TOURING MOTORCYCLE
* EQUIPPING THE BIKE FOR TOURING
* PLANNING THE TRIP
* WHAT TO TAKE AND HOW TO PACK IT
* ON THE ROAD
* MOTORCYCLE CAMPING
* TRAVEL ACROSS THE BORDERS
* TRAVEL PHOTOGRAPHY
* AFTER THE TRIP

PLUS: Where to write for travel & camping information in each state and in each National Park

No touring motorcyclist should be without this valuable reference book



More than 80 fact- and photo-filled pages written by Motorcycle Touring & Camping Experts Cliff Boswell and George Hays. Beginning motorcycle touring riders and pros alike will find all of the answers in this helpful reference book.

Fill out coupon and send along with $2 for your copy of **Two-Wheel Touring & Camping.** You'll be glad that you did!

ORDER BLANK: TWO-WHEEL TOURING & CAMPING
Two-Wheel Touring & Camping, Box 638, Sierra Madre, Cal. 91024

Please Print Plainly

ENCLOSED FIND $ ____ IN CASH [ ] CHECK [ ] MONEY ORDER [ ] TO RESERVE MY COPY OF "TWO-WHEEL TOURING & CAMPING" AT $2. EACH.
(Add 66¢ for First Class, 80¢ Air Mail, U. S. Only)

NAME_____

ADDRESS_____

CITY_____ STATE & ZIP _____

LANGLITZ LEATHERS are often copied, but never equalled. Known throughout the motorcycling world as the finest in leather garments, nothing equals the comfort and good looks of LANGLITZ LEATHERS – always custom-made in the finest horsehide. Get the facts. You are probably paying for LANGLITZ LEATHERS, so why not wear them? Our catalog is yours for the asking –

Langlitz Leathers

8200 S.E. Stark
Portland, Oregon 97216

GUARDIAN ANGELS FOR ENGINES
OVERSPEEDING ← PREVENT → OVERHEATING
WITH
WESTACH
THE ACCEPTED STANDARD SINCE 1944
ELECTRIC
TACHOMETERS
EXHAUST TEMP.
CUSHION, JEWELLED INSTRUMENTS 2% ACC. 2 YEAR WARRANTY.
SEND FOR FREE CATALOG SHEETS TODAY.
WESTBERG MFG. CO. SONOMA, CALIF. USA 95476

PIKES PEAK TOUR!
AUGUST 4, 5, & 6
The Champagne of Motorcycle Tours. Join us for the scenic trip of a lifetime thru the beautiful Colorado Rockies. Plan your vacation now!
Write: Betsy & Bill Manning
630 Cook St.
Denver, Colorado 80206

WORLD'S LARGEST STOCK OF NEW AND USED
INDIAN PARTS
C.O.D. MAIL ORDERS
PARTS AND OVERHAUL MANUALS
SAMMY PIERCE
119 E. Huntington Dr., Monrovia, Ca. 91016
(213) 447-8430 (213) 447-4078

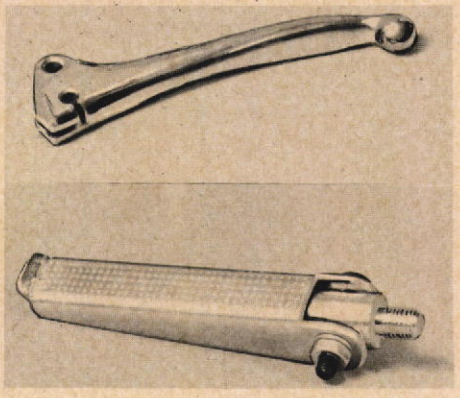
* FORK & FRAME REPAIRS
* WHEEL REPAIRS
* SPOKES, NIPPLES & RIMS
* FORK & FRAME MODIFICATIONS
* CUSTOM & RACING PARTS

Phone:
213 / 280-4003

SEND IT TO....

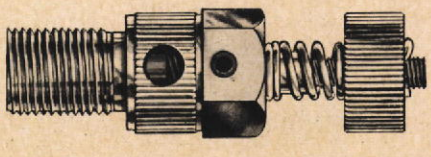
BUCHANAN'S
FRAME SHOP / 629 E. Garvey / Monterey Park, Calif. 91754

SHOWCASE



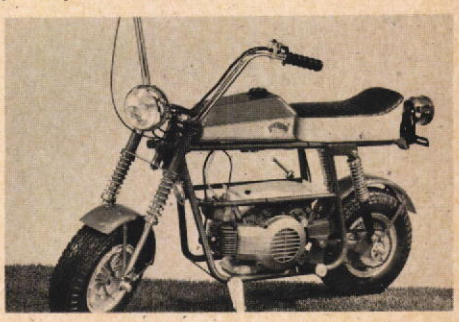
ALL-METAL brake control lever and passenger's foot rests, from Barnett Tool & Engineering, are offered for Honda riders. Chrome-plated levers are designed to replace stock plastic levers normally used on Honda Mini Trail and Trail 70 models. Levers fit standard bracket. Folding foot rests fit Mini Trail, Trail 70 and C-100, C-110 Cub models. Furnished in pairs, foot rests incorporate 10 x 1.25mm thread. Items available thru dealers only. Dealers may order from B.T. & E., 4915 Pacific Blvd., Vernon, Calif. 90058.

NOW available from Butler & Smith, Saddle bags for BMW R 50/5, R 60/5, and R 75/5. These functional bags are made of genuine high-grade leather complete with chrome-plated mounting brackets which attach easily to all /5 frames. Saddle bags No. M-1002 (with brackets) are priced at $55 per pair. Brackets alone, No. M-1003 are priced at $9 per pair. Contact your nearest BMW dealer or write to: Butler & Smith, Inc., Dept. M, Walnut Street & Hudson Ave., Norwood, N.J. 07648.



WESTERN Scooter Distributors' new compression release with one-way valve action is now available at most dealers. Patented check valve action with two springs of synchronized tension permits release of compression with no possible return of foreign matter of any type. Designed for easy installation and cleaning (no filter to clean or clog up). Zinc coating prevents rust. Simple positive action by operator pulling lever gives desired braking performance without danger of back suction. Unique design fits both ½" and ¾" x 14mm. Suggested list $11.45. For dealer information, write to Western Scooter Distributors, Dept. M, 1599 Custer Ave., San Francisco, Calif. 94124.

BUCO'S new full coverage GT helmet, available in Gloss White, Pearl Black, Silver-Pearl Metalflake and JJ Metalflake, this helmet is distinguished with stylized emblems and matching center stripe. New Bucolyte material produces a helmet shell that combines exceptional strength with lightweight comfort, meets M.S. & A.T.A. and Z 90.1-1966 standards, while interior is custom tailored for comfort. Available from your Buco dealer.



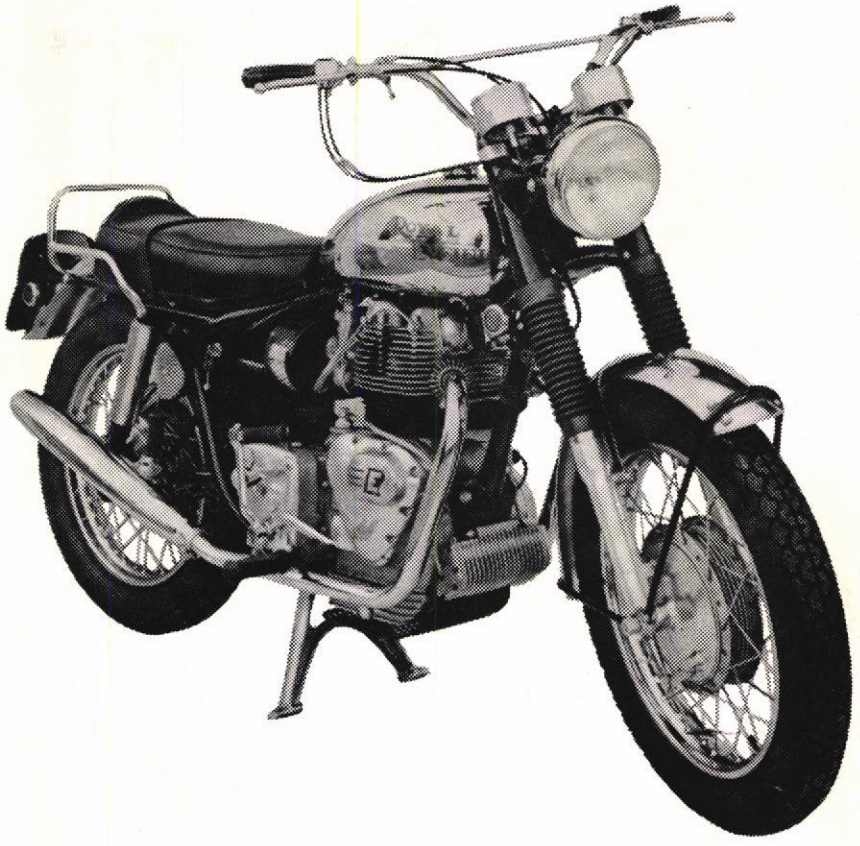
LATEST addition to Broncco mini-bike line is this T/X-7, featuring 4 HP, 50cc 2-stroke engine, coupled to automatic single speed torque converter. Model features approved lighting and horn as standard equipment, making it street-legal in most states. Speedometer is optional extra. Suggested retail price is $284.95 f.o.b. the distributors: Engine Specialties, Inc., Dept. M, Box 260, Cornwells Heights, Pa. 19020.

ROYAL ENFIELD

1970 Series II INTERCEPTOR

Four big new extras for the 1970 Royal Enfield 750cc with the 1969 price. The well built and highly proved SERIES II INTERCEPTOR remains basically unchanged for 1970—but due to increased production efficiency and continuity, it is now endowed with these four added accessories—**An OIL COOLER, AIR CLEANER, SKID PLATE, and PASSENGER HAND RAIL.**

These have become standard equipment, to further enhance the robust character and powerful personality of this thrilling mount.



Only ROYAL ENFIELD has Automatic NEUTRAL FINDER— Cuts Shifting by 50% No Need to Downshift Just Press the Neutral Lever

This is the same 750cc. vertical twin Enfield engine that Don Sliger used in the Boneville speed trials when he did 158 mph.

The engine lubrication system on the SERIES II is of increased flow capacity with a new total wet pump system.

ENGINE
O.H.V. vertical twin 4-stroke.

BORE AND STROKE
71 x 93 mm. (2.9" x 3.8").

COMPRESSION RATIO
8.5 : 1

CARBURETORS
TWIN AMAL CONCENTRIC.
30 mm. Choke dia.

IGNITION
12v. Lucas Capacitor System with twin coils. Automatic Advance.

REAR SUSPENSION
Pivoted Fork with Girling oil-controlled Damper units.

FRONT FORK
Telescopic with two-way hydraulic damping.

HUBS
Full width, light alloy. Q.D. Rear.

BRAKES
8" x 1¼" Front, 7" x 1" Rear.

TYRE SIZES
3.50 x 19 front, 4.00 x 18 rear. Dunlop K.70.

GEAR RATIOS
4.44, 6.05, 8.19, 12.4.

M.P.H. per 1,000 r.p.m. in top gear
16.9.

FUEL TANK CAPACITY
2.3 U.S. gallons.

OIL TANK CAPACITY
4.5 U.S. pints.

GEARBOX OIL CAPACITY
1 U.S. pint.

SEAT HEIGHT
30.5 ins.

WHEELBASE
57 ins.

OVERALL WIDTH
32 ins.

GROUND CLEARANCE
5.75 ins.

WEIGHT
426 lbs.

DEALERS—You can increase profits by adding the prestige, high quality **Royal Enfield** to your line. Write nearest distributor listed below.

Please Mention MOTORCYCLIST 7 When Inquiring

Royal ENFIELD

DISTRIBUTORS

FLOYD CLYMER
MOTORCYCLE DIVISION
222 N. VIRGIL AVE.
LOS ANGELES, CALIF. 90004

SHORES MOTOR, INC.
1981 E. 8-MILE RD.
WARREN, MICH. 48000

SHILLINGFORD & SONS
P.O. BOX 588
GREEN LANE & RADCLIFF ST.
BRISTOL, PENNA. 19007

SAM AVELLINO
240 HARRIS ST.
REVERE, MASS. 02151

Dept. M7

Keep it wide open.

©1970 American Honda Motor Co., Inc.

Honda Motosports–No other bike comes close to them.

Take the great new Motosport 175 out to the desert. Way out. Open up the big four-stroke OHC twin... 19 bhp @ 9,500 rpm. And ride the way you like to ride. Rough. You'll never have a worry. Honda Motosports are the toughest, most dependable bikes built.

Anywhere off the road is SL-175 country. Knobby tires are standard. Extra-long-travel front shocks... along with the soft, pleated single seat... smooth out the bumps. And this rugged performer weighs in at only 260 pounds.

This new Motosport is at your Honda dealers' now. Its candy colors and radical styling will blow your mind. And so will the big selection of other Motosports, Super Sports and Scramblers. Drop by and see for yourself. When it comes to making great bikes, no one else even comes close to Honda. From mighty to mini, Honda has it all.

The all-new Motosport 175. Like no other bike.

HONDA

Always ride safely. Wear a helmet and observe all rules of the road. For a free color brochure, write: American Honda Motor Co., Inc., Dept. AD, Box 50, Gardena, Calif. 90247.